

Special Report

Small Arms in Rio de Janeiro

The Guns, the Buyback, and the Victims

*By Pablo Dreyfus, Luis Eduardo Guedes, Ben Lessing,
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and Patricia Silveira Rivero*



A study by the Small Arms Survey, Viva Rio, and ISER

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Viva Rio is a non-governmental organization headquartered in Rio de Janeiro. Its main goal is to promote a culture of peace and social development through fieldwork, research, and the formulation of public policies. It was founded in December 1993 by representatives of different sectors of civil society as a response to growing violence in Rio de Janeiro. In recognition of the diverse nature of security matters, however, Viva Rio's area of interest has since expanded from the local to the regional and international levels. The organization seeks to raise awareness and affect change through community action, communication, and involvement in international activities concerning human security.

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- firearms—the main vector of the violence epidemic; and
- poor areas—*favelas* and impoverished suburbs that are in need of targeted social work within a framework of urban rehabilitation.

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Abbreviations and acronyms

| | |
|---------------|--|
| BRL | Brazilian real |
| CBC | Companhia Brasileira de Cartuchos |
| CD | campaign dummy |
| DFAE | Divisão de Fiscalização de Armas e Explosivos/Division of Oversight on Arms and Explosives |
| FRH | firearms-related homicide |
| IBOPE | Brazilian Institute of Public Opinion and Statistics |
| IGP | general price index |
| IMBEL | Industria de Material Bélico do Brasil |
| ISER | Instituto de Estudos da Religião |
| SINARM | Sistema Nacional de Armas/National Arms System |
| ILANUD | United Nations Latin American Institute for the Prevention of Crime and the Treatment of Offenders |
| TpEM | programmes and media spots related to the campaign |
| TxAR | rate of collected weapons |
| USD | US dollar |

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Overview

Antônio Rangel Bandeira

The small arms buyback in Rio de Janeiro

Do voluntary small arms collections reduce violence? Do they work in isolation, or do they have to be combined with other control measures? The first chapter of this publication attempts to answer these questions by analysing the impact in the state of Rio de Janeiro of a national small arms buyback campaign that took place from July 2004 to October 2005. The study, by Dreyfus, De Sousa Nascimento, and Guedes, concludes that in Rio de Janeiro, small arms voluntary collection campaigns do indeed reduce armed violence, as long as they are not implemented in isolation; they must be combined with other preventative measures. These conclusions are controversial in many countries, but are no longer disputed in Brazil, a country where approximately 100 people die each day as a result of small arms.

The conclusions have since been confirmed in a nationwide study by the Brazilian Ministries of Health and Justice. According to these ministries, the number of gun-related deaths decreased by 12 per cent over three years, from 39,325 deaths in 2003 to 34,648 in 2006. The rate of deaths caused by small arms decreased from 22.4 per 100,000 inhabitants in 2003 to 18 in 2006, equal to a fall of 18 per cent in relative numbers (MS and SVS, 2007). The government study finds that the reduction was higher in those states where a higher quantity of small arms was handed in during the buyback campaign. A ban on civilians carrying guns introduced in 2003 also contributed by lowering the number of deaths in interpersonal conflicts such as bar brawls and traffic altercations.¹

Among the main lessons learned from the buyback experience in Rio de Janeiro are the following:

1. The preliminary disabling of small arms at the moment of handover helped to assure the donor that his or her weapon had in fact been destroyed. This

was important, given the low levels of trust in the police force in Brazil. It also provided security to the churches and NGOs that served as collecting stations in areas of risk, such as *favelas* (urban slums). Hammers proved to be a cheap, effective, easily transportable, and environmentally friendly method of disabling the weapons.

2. The involvement of about 600 churches and several NGOs as collection stations encouraged the participation of people who might not have handed weapons over in a police station, given the lack of trust in the police. Viva Rio alone gathered about 15,000 small arms.
3. The public ceremonial destruction of some of the 460,000 small arms, in line with UN recommendations, served educational and awareness-raising purposes. In some states the small arms, which had already been disabled at the point of collection, were crushed by tractors in public ceremonies before being smelted in steel mills.
4. The flow of participants increased markedly on the day after campaign spots were broadcast on TV and the radio, according to media monitoring by Viva Rio.
5. Fear of their guns falling into the wrong hands or causing an accident were key factors motivating the predominantly middle-class participants of the buyback, according to anonymous questionnaires issued to participants in Rio de Janeiro.

There were problems with the campaign, however, including the following:

1. Although the campaign had positive results in terms of persuading large numbers of older people to participate in the buyback, it reinforced the poor rates of participation among youth. Drawing on the experiences of other countries where young people tended not to participate, campaign materials were targeted at adults and focused on the risk that keeping a firearm at home represents to families. Research still needs to be conducted into why young people in Brazil and other countries are unreceptive to disarmament efforts.
2. We were not able to convince the government to invest in compensation for ammunition or for monitoring the quantity of ammunition that was turned in. Other campaigns, such as the current buyback in Argentina, have included ammunition as an important component.

The main measures of success of the Brazilian voluntary disarmament campaign are its size, in terms of the quantity of small arms that were delivered and destroyed, and its impact on the death rate. The government intends to develop an annual month-long campaign targeting the more than four million small arms that circulate in the informal market, i.e. small arms kept illegally by citizens. In 2003 alone, 26,908 small arms were stolen from homes in Brazil (Rangel Bandeira and Bourgois, 2006, p. 25).

The value of the criminal firearms market in Rio de Janeiro

The second study, by sociologist Patricia Silveira Rivero, analyses the volume, price, and symbolic value of small arms in the criminal market in the city of Rio de Janeiro. Using both qualitative and quantitative methods, she finds that 928,621 small arms circulate in the so-called ‘Marvellous City’, of which 159,723 are used in crime. The author estimates that there are 4.3 small arms for every 10 men aged 15–65 years in the city, and that guns in Rio are highly ‘criminalized’: one in six small arms will be used to commit a crime.

Interviews with police officers and with inhabitants of *favelas* who are in contact with drugs traffickers shed light on a widely held perception that the ‘*banda podre*’ (corrupted part) of the police forms an essential component of the organized crime system. In the words of one of the *favela* residents interviewed, ‘you don’t kill police; you buy them’.

Rivero draws our attention to the similarities between the small arms used by the police and drug gangs, as an indicator of diversion of weapons from police officers to criminals. This link is confirmed in a recent Viva Rio study that found that 11 per cent of the 10,549 small arms seized from criminals in Rio de Janeiro state in 1998–2003 were originally sold to members of the state military police (Câmara dos Deputados, 2007, pp. 478–79). The new government of the state of Rio de Janeiro is currently taking steps to reduce the collusion of large sectors of the police with organized crime, e.g. by improving control over institutional stockpiles of small arms and ammunition.

Parts of Rivero’s study allude to the ongoing debate over whether to involve the armed forces in the fight against drug trafficking. She draws attention to the simplistic characterization of the fight against the crime as a ‘war’. This

definition is problematic, since it places the emphasis on ‘eliminating the enemy’ rather than acting with care to investigate drug trafficking without victimizing innocent people or killing criminals. Public opinion is, however, strongly in favour of military intervention: 88 per cent of the population supports military involvement, according to a recent national poll.² The success of military participation in security efforts during the Pan-American games in July 2007 provided new impetus to the debate. The Ministry of Defence has also re-engaged with the idea following the successes of the Brazilian Army in commanding UN peacekeeping forces in Haiti, specifically the pacification of the Bel-Air *favela* in Porto Príncipe. But the memory of 21 years of military dictatorship in Brazil is likely to impede any attempts to involve the military in police work. The military does not fully favour intervention either, fearing that its ranks will be infiltrated and corrupted by crime, as has happened in Colombia and Mexico, where the armed forces are involved in tackling drug trafficking. To others, it is discomfiting to see an army with over 200,000 men mostly immobilized while organized crime and drug trafficking expand, with the complicity of parts of the police force.

Small arms in Rio de Janeiro: unique among cities?

The last of the three studies, by Benjamin Lessing, looks at demand for small arms in Rio de Janeiro and asks whether the characteristics of the city are unique, in particular in its impoverished peripheral areas where armed violence is most acute. Lessing draws comparisons with three other major cities in Brazil: São Paulo, Recife, and Porto Alegre, where nothing like the organized drug syndicates of Rio exists, and asks how the dynamics of firearms demand vary across the cities.

Using qualitative methods, the study looks at three categories of people in each of the four cities: law-abiding citizens, or *trabalhadores* (workers); at-risk youth, i.e. those considering entering some criminal organization (or becoming an autonomous property criminal); and the criminal organizations themselves. For each group, the results show that the degree of organization of the local drug trade is a crucial determinant of the dynamics of firearms demand. This is because in peripheral areas, where public security forces are often

absent or even in league with criminal gangs, a dominant organized armed group can impose a form of ‘law and order’ and can practise a form of community gun control, demanding to know who has a weapon and why, and even confiscating weapons. Under such conditions, personal gun ownership by law-abiding citizens hoping to protect their homes and families is not a viable defence strategy. In cities where criminal gangs are less powerful, gun ownership is a far less risky option for ordinary residents.

The study also finds that for many youth in the periphery the option of crime is attractive, even though it carries risks, given the absence of alternative ways of alleviating poverty and exclusion. In the words of one interviewee, the option is ‘live a little like a king, or a lot like a nobody’. Gun ownership for many young people in the poor peripheries is one of the perks of membership of an armed criminal organization and brings status, power, wealth, and access to women.

One last point that is worth mentioning—though not directly addressed in the three chapters—is a problem that has gained force over the last three years in Rio de Janeiro *favelas*: the rise of the so-called ‘militias’. They operate by selling private protection to *favela* communities against the threat of drug traffickers. Beyond ‘keeping the peace’, the militias have moved into other lucrative areas such as the provision of kitchen gas, transportation, and cable TV, and real estate activities. This new private and illegal security force purports to step into the gaps left by state security forces. It complicates an already cloudy relationship between organized crime and the police force in Rio de Janeiro, adds a new variable of potential conflict in *favelas*, and represents a grave challenge to the construction of democratic public security forces in Brazil. 📌

Chapter 1

Voluntary Small Arms Collection in a Non-conflict Country: Brazil and the Experience of Rio de Janeiro

Pablo Dreyfus, Marcelo de Sousa Nascimento, and Luis Eduardo Guedes

Introduction

After several years of parliamentary debate and pressure from civil society organizations, on 9 December 2003 the Brazilian Congress approved a new and stricter national firearms control law (Act No. 10,826) known as the Disarmament Statute (Presidência da República, 2003). Among other small arms control measures, the Disarmament Statute established a six-month (later extended to 18 months) national buyback programme for the voluntary collection of small arms. This buyback campaign coincided with an amnesty for the registration of unregistered weapons. By 23 October 2005, when the national firearms buyback campaign concluded, 459,855 small arms had been collected in Brazil as part of the campaign (Entregue sua Arma, 2005). This quantity represents 3 per cent of estimated private holdings (which total 15.2 million); or 6.8 per cent of estimated legal private holdings (there are 6.8 million registered civilian guns); or 9.92 per cent of estimated private informal holdings (there are an estimated 8.5 million unregistered guns in the hands of law-abiding citizens); or 11.9 per cent of estimated criminal holdings (there are 3.8 million guns in the hands of criminals) (Dreyfus and De Sousa Nascimento, 2005, pp. 125–96).

As this chapter will show, the combined effects of the implementation of measures to restrict the purchase of small arms and ban illicit carrying at the national and local levels (and thus penalize and seize illicitly carried firearms and ammunition) and the 18-month voluntary small arms collection campaign are associated with a significant decrease in firearm-related deaths (and, above all, homicides). At the national level, a study by the Ministry of

Health of Brazil concludes that between 2003 and 2006 there was a decrease of 18 per cent in firearm-related deaths. This means that 23,961 lives were saved by the implementation of the new law, coupled with investment in public security (MS and SVS, 2007). Using a similar methodology, this chapter presents an analysis of the effectiveness of small arms collection in a particularly violent setting: the city and state of Rio de Janeiro.

National small arms collection campaigns for crime prevention usually require substantial efforts and resources from both international and national sources. Independently of the number of weapons collected during the buy-back programmes, two central questions must be answered at the end of the day: does small arms collection work to reduce violence?; and, does it work by itself or does it have to be combined with other small arms control measures?

This chapter is addressed primarily to decision makers, members of academia, and civil society organizations in countries with similar small arms-related problems in urban areas, particularly in Latin America, a region that experiences 42 per cent of firearm-related homicides in the world (Small Arms Survey, 2004, p. 176). Encouraged by the positive results of the gun buyback campaign in Brazil, the governments and civil society activists of other Latin American countries may try to replicate the experience. This article provides a framework and criteria for assessing the factors and complementary measures that are conditions for and indicators of success.

The chapter is divided in four parts. The first part analyses small arms-related violence in Brazil, as well as the flaws in the legal and regulatory systems for preventing firearms proliferation and misuse. The second part concentrates on the Disarmament Statute and particularly the buyback campaign as a solution to these flaws. The third and fourth parts present an analysis of the implementation and results of the voluntary collection campaign in Rio de Janeiro.

Small arms-related violence in Brazil: victims and weapons

The problem

Brazil is neither at war, nor suffering any kind of internal armed conflict along political lines. Moreover, the country has not been involved in any serious

internal or international conflict in its recent history. Yet Brazil has the highest number of firearm-related deaths in the world. According to the Ministry of Health of Brazil, 35,969 people were killed by firearms in 2006, whether through homicide, suicide, or unintentional injuries. In absolute numbers, this is higher than other countries with serious small arms-related problems such as Colombia, El Salvador, South Africa, and the United States (Phebo, 2005, p. 15).

When standardized by population, Brazil has the fourth highest rate of gun-related deaths in the world at 19.3 per 100,000 people. The risk of dying by firearms in Brazil is 2.6 times higher than in the rest of the world, and the great majority of these deaths (92.5 per cent) are homicides. Of the remainder, 3.1 per cent are suicides, 3.3 per cent of unknown intent, and 1.1 per cent accidents. In Brazil, 74.4 per cent of homicides in 2006 were committed with firearms (Waiselfisz, 2008, p. 93). In 1982 the firearm-related homicide rate was 7.2 per 100,000, yet by 2002 it had increased to 21.8 deaths per 100,000 people. The increase was constant over the 21-year period (Phebo, 2005, pp. 16, 19). The total cost of hospitalization due to firearm-related injuries is estimated at between USD 36,129,756 and USD 38,926,899 per year (Phebo, 2005, p. 35).

Small arms-related violence in Brazil is related to crime, stimulated by drug trafficking, and rooted in social inequality within very densely populated urban areas (Fernandes, 1998; Cano and Santos, 2001). In the west-central region of the country, which is still undergoing a process of land occupation and colonization and is located close to the borders of drug-producing countries, the firearms mortality rate has increased by 57 per cent in the last 20 years. In the south-east of the country, where big urban centres—predominantly state capitals such as Rio de Janeiro and São Paulo—have been heavily affected by drug trafficking, the rate increased by 54.1 per cent over the same period (Phebo, 2005, p. 19).

Small arms-related violence in Brazil is mainly an urban problem. The higher average firearms death rates are concentrated in cities with more than 100,000 inhabitants that suffered rapid and disorganized urbanization processes (Fernandes and De Sousa Nascimento, 2007). The analysis in this report has most relevance to countries (especially developing countries) with similar problems of urban violence and crime.

Table 1.1 **Size of cities and average firearms death rates in Brazil**

| Size of city by number of inhabitants | Average firearms death rate per 100,000 people |
|---------------------------------------|--|
| Up to 19,999 | 6.9 |
| 20,000 to 99,999 | 10.1 |
| 100,000 to 499,999 | 22.1 |
| Over 500,000 | 32.0 |

Source: Fernandes and De Sousa Nascimento (2007)

The victims

As in the rest of Latin America, firearms-related violence overwhelmingly affects young men. In Brazil, the risk of a young man of between 20 and 29 years of age dying by firearms is seven times higher than for the rest of the population, and four times higher than for the rest of the male population. The risk of death by firearms of these young men is 38 times higher than for the female population and 20 times higher when compared to the female population in the same age group (Phebo, 2005, p. 27). The risk is heightened among poor, black, or mixed race young males between 15 and 29 years of age with low education levels. The lack of opportunities for improvement in personal, professional, and social status generates a sensation of impotence and low self-esteem among this group, and may lead young men to resort to armed violence to express these frustrations (Cano and Santos, 2001; Dowdney, 2003; Phebo, 2005, p. 27). In the words of Brazilian epidemiologist Luciana Phebo (2005, p. 27), ‘[a]mong youth in Brazil, life expectancy goes down in parallel with their life hopes’.

Arms, the law, and its flaws

At the same time as Brazil is affected by small arms violence, the country also possesses a large and thriving small arms industry. That industry is made up of a handful of companies and is dominated by just two: Forjas Taurus S.A. and Companhia Brasileira de Cartuchos (CBC). These companies hold near national monopolies in handguns and small arms ammunition manufacturing, respectively. The other major player in the small arms market

is IMBEL, a public company administered by the Ministry of Defence, with ties to the army, which mainly produces military arms and ammunition. Together, these three companies have helped Brazil to consolidate its position as a medium-sized small arms producer and exporter, the second-largest in the western hemisphere after the United States (Dreyfus, Lessing, and Purcena, 2005).

This industry grew virtually unregulated from the 1960s to the late 1990s, partly due to the historic lack of effective small arms control in Brazil. The first national regulation on small arms (a Ministry of the Army decree) was enacted in 1934 (with secondary regulations issued in 1936). Although it organized and regulated small arms production and foreign trade, the decree did not deal directly with domestic sales or the registration of small arms. It gave vague guidelines for the Ministry of the Army to establish arrangements with state government authorities concerning registration. The purchase and use of firearms by civilians remained unregulated until 1980, when the Ministry of the Army enacted regulations establishing the number and type of weapons that civilians above 20 years of age would be able to purchase, and made the registration of those weapons mandatory. Small arms were to be registered with the civil police of each state; however, there was no national institution in charge of centralizing the data on firearms and their owners.³ Nonetheless, this was an improvement: prior to this, arms registration was voluntary. This situation, added to a historical lack of horizontal (state-to-state) and vertical (state-to-federal government) police cooperation, prevented the tracking of imported and nationally produced small arms.

It was not until 1997, with the SINARM Act (Act No. 9437), that the National Arms System was created and a legal requirement for comprehensive registration of privately owned guns was introduced. According to this law, in order to purchase a small arm, an individual must first approach local authorities (usually the civil investigative police) to obtain a registration permit from SINARM (which is administered by the federal police). This permit only authorizes the person to keep the weapon at home; weapons-carrying licences could be obtained—subject to additional procedures—from state authorities for carrying within state borders and from the federal police for carrying throughout the national territory.

The law required SINARM to maintain a national database of all registered and seized firearms in the country. Each state was required to update this information periodically, but in practice the process of integration of databases was slow and hampered by underreporting by states.

The lack of cooperation between the federal institutions that monitor arms and ammunition supply (manufacture, sales, imports, and exports) and demand (buying, carrying, use, and registration) posed an additional problem. The army—which has neither police powers nor duties—controls production; sales by manufacturers to dealers and exporters; imports; and exports and direct factory sales to armed forces, state military police corps, federal intelligence agencies, and members of the armed forces and federal intelligence agencies when acting as private users; as well as to arms collectors, hunters, and competitive sports shooters. The federal police (under the Ministry of Justice), meanwhile, centralizes the information on arms registered by private citizens and companies, the holdings of civilian and federal law enforcement agencies, and information about seized weapons. Up until 1997 there was no communication between these agencies. The 1997 SINARM Act required the Ministries of Justice and Defence to establish an inter-agency protocol for information exchange on small arms, but this was never done, and in practice there was no exchange of information. The Act also required manufacturers and importers to send the federal police a list of small arms sold or purchased, with the identification of the purchaser. Information was not provided on a real-time basis (it was erratically sent on diskettes), however, and SINARM was not notified consistently.

The lack of inter-agency cooperation meant that information on the trade routes taken by newly produced and imported firearms was never compared with available data on arms registration and seizures. This made it practically impossible to track patterns in the routes used for diverting arms and illicit trafficking, or to detect the irregularities in arms sales that enable informal markets to be established. Police forces, particularly the federal police, were therefore crippled in their efforts to fight the illicit trade in small arms.

It is precisely because of these gaps in control that the Brazilian small arms industry was able to produce most of the small arms (handguns, predomi-

nantly revolvers) used to commit crimes all over the country. In only two states, Rio de Janeiro and Pernambuco, is there a significant (although low, 1.6 per cent and 1.2 per cent, respectively) proportion of foreign automatic military-style small arms among the weapons seized by the police (Dreyfus and De Sousa Nascimento, 2005).

According to the Brazilian research institute Instituto de Estudos da Religião (ISER), total small holdings in Brazil were estimated at 17 million firearms in 2005 (Dreyfus and De Sousa Nascimento, 2005). Only 10 per cent of these weapons belong to state stockpiles (armed forces and law enforcement), while 90 per cent are in private hands (15.2 million weapons) (Dreyfus and De Sousa Nascimento, 2005, p. 160), far above the international average of 60 per cent of private small arms holdings.

A third of privately held small arms (4.6 million weapons) are informally held; that is, they belong to law-abiding citizens who have not registered their arms, either because they bought them before registration was mandatory or because they bought them in an irregular way. State institutions are thus clueless about the location of those guns, which facilitates their migration to criminal markets through theft or illegal sales. Twenty-five per cent of private holdings have been estimated to be in criminal hands (3.8 million weapons) (Dreyfus and De Sousa Nascimento, 2005, p. 160).

The Disarmament Statute: domesticating the small arms industry and curbing crime through gun control

During the past decade, in the context of a public security crisis and with increasing civil society engagement, the small arms problem has been given priority on the parliamentary and public security agendas. There was an obvious need for stiffer controls over all aspects of small arms, in particular carrying and possession by civilians. Civil society has kept pace in responding to the rate of growing urban violence that has ravaged Brazilian society since the early 1990s, through research, advocacy, mobilization, and civic programmes. The most solid examples of civil society mobilization around the issue have appeared in two megalopolises that are so terribly affected by violent crime: Viva Rio in Rio de Janeiro and Sou da Paz in São Paulo. In

December 2003 a coalition of NGOs and parliamentarians, working with the support of the mass media, finally achieved the adoption of a more restrictive small arms control law known as the Disarmament Statute.

The Disarmament Statute was enacted on 9 December 2003 (Law No. 10826) by the Brazilian Congress, with secondary legislation issued on 1 July 2004 (Decree No. 5123) by the executive. According to the Statute, the federal government (through the federal police) is in charge of registering small arms; controlling domestic sales to civilians; and centralizing information about seized, registered, produced, exported, and imported small arms in a single database. Under this new law, states gave up their prerogative to register small arms and grant licences to carry them at the local level. The law also mandates the army and the federal police to link their databases through an encrypted on-line system with differentiated levels of access and confidentiality protocols. This ensures that relevant information on seized weapons is exchanged so that both institutions can see whether such weapons have been exported previously, or can trace the initial purchaser of each weapon after it left the factory.

The Statute also establishes a series of norms that enhance control over the circulation, trade, and use of small arms. The goal of these measures is to reduce the availability of small arms, which has been identified as the catalyst or trigger cause of the epidemic of lethal violence in the country. Among the measures are the following:

- A ban was imposed on civilians carrying small arms (previously permitted subject to authorization by the state police), punishable with imprisonment with no possibility of freedom on bail.
- Very strict prerequisites were introduced for the purchase of small arms by individuals. These include an explanation of need for the weapon; the absence of a criminal record; proof of regular lawful income and employment; a certificate of domicile; proof of technical ability to manipulate and store firearms; medical and psychological test passes; and payment of purchase and registration taxes.
- Transfers and sales between individuals must be declared to the federal police and authorized by this agency.

- Periodic inspections of private security companies must be made by the federal police in order to detect undeclared theft or losses of small arms.
- International trafficking, illicit trade, stockpiling, and manufacturing of small arms have been defined and criminalized.
- Illegal possession of small arms is punished with fines and imprisonment.
- A referendum was held on 23 October 2005 for the Brazilian people to decide whether to ban the sale of small arms and ammunition to civilians.
- A six-month (extended to 18 months) national buyback programme was instituted for the voluntary collection of small arms. The programme coincided with an amnesty for the registration of unregistered weapons. After the amnesty, illegal owners would be subject to penalties established by the law for illegal possession.

The remainder of this chapter analyses the impact of the buyback programme, through the specific case of the state and city of Rio de Janeiro.

The buyback

The buyback programme, officially known as the 'Campaign for Voluntary Arms Handover' ('A Campanha de Entrega Voluntária de Armas'), was a national effort politically coordinated by the Ministry of Justice with the support and help of a network of NGOs and other civil society organizations. The campaign officially began on 15 July 2004 for a period of six months, during which time the Ministry of Justice and participating NGOs expected to collect 80,000 weapons. After more than 250,000 small arms had been collected, the Ministry of Justice extended the campaign for six additional months and then again in December 2004 for another six months up to 23 October 2005.

By law, the federal police is responsible for the collection of small arms, though it is authorized to develop agreements with state governments, city governments, and civil society organizations to support collection efforts. The Brazilian Army is responsible for the final disposal of the collected weapons.

The campaign was not uniform throughout Brazil. In some densely populated and more developed states such as Rio de Janeiro and São Paulo, civil society played a very active role and even opened and co-administered small

arms collection points in cooperation with federal and local authorities. In the state of Paraná, in the south of the country, the state government had a leading role in administering the campaign even before the national campaign was launched in July 2004. In the more traditional state of Bahia, in the north-east of the country, Catholic and other Christian churches played a leading role in collecting the weapons, in cooperation with federal and local authorities. But these were exceptions: in the rest of the country the campaign was centralized and administered by the federal police, in part because of the lack of organized civil society groups and in part because of the reluctance of federal police representatives to work with civil society institutions, a cultural barrier that only states with a well-organized network of NGOs were able to break.⁴

The collection was made on a ‘no questions asked’ basis, and people handing over weapons could decide whether to identify themselves. They received between BRL 100 and BRL 300 (roughly USD 40–130) in compensation, depending on the kind of weapon. Low-calibre revolvers and pistols were paid at USD 40, rifles and shotguns at USD 86, and assault weapons at USD 130. These prices are far below prices in the legal and criminal markets (Dreyfus, Lessing, and Purcena, 2005; Rivero, 2005). According to Antônio Rangel Bandeira, NGO member of the civil society–government commission for the coordination of the campaign, the decision to pay below market prices was political, aimed at preventing people from using the money they received to purchase new weapons and at strengthening the symbolism of handing over guns out of civic duty and responsibility rather than simply for economic reasons.⁵ Payment was made through a deposit in a bank account.

According to Rangel, civil society organizations played a decisive role in securing the inclusion of the buyback campaign in the Disarmament Statute,⁶ on the grounds that guns at home are a greater risk than protection factor. The goal was to disarm law-abiding citizens to prevent fatal accidents, homicides, and wounds caused by interpersonal conflicts. The proponents of this measure were influenced by the work of Dr Arthur Kellerman (Kellerman et al., 1993; Rangel Bandeira and Bourgois, 2006) and by previous national buyback campaigns that had been conducted within the framework of new and stricter gun control laws, such as the experiences in Australia in 1996–97 and the United Kingdom in 1995–96 (Reuter and Mouzos, 2003).

In addition to the Australian and British campaigns, organizers of the Brazilian campaign studied previous buyback campaigns implemented in other countries, particularly the Gun Free South Africa campaign (1994); the UN Development Programme-coordinated Gramsh Pilot Programme in Albania (1999); the arms collection campaign in Mendoza, Argentina (2000); the Swords into Ploughshares programme in Mozambique (1996–97); and the local voluntary collection campaign in Oakland, California (1995).⁷

The National Small Arms Weapons Collection campaign in Australia (1996–97) was important because it showed that a consistent and well-coordinated national small arms collection effort sustained over a long period of time (one year) generated significant results in terms of a decrease in homicide rates. In contrast, the South African collection lasted only 24 hours and did not achieve significant results. The Gramsh and Mendoza experiences were examples of the advantage of offering alternative rewards such as local development assistance or vouchers for purchases in local grocery stores (as a boost to the local business community) instead of cash. The Brazilian government discarded this idea, however, on the basis that it would be extremely difficult to implement due to bureaucratic constraints (Godnick, 2001; Meek, 1998; Faltas, 2001).⁸

The experience in Mozambique showed the importance of disabling or destroying the weapons at the collection spot in order to prevent their diversion back to illicit circuits. Finally, the Oakland voluntary collection campaign showed that in an urban crime setting, most of the weapons were handed over by male, middle-class legal owners of above 50 years of age, rather than young poor men in conflict with the law. This fact, according to Rangel, gave an idea of the age and social group that would be delivering weapons during the collection campaign in Brazil. The Oakland experience also served to refute the cynical argument that criminals would take advantage of the collection campaign to get rid of weapons used in crimes and at the same time make some money. That was not the case, since most of the weapons collected were legal (Meek, 1998).⁹

The buyback campaign organized by the government of the state of Paraná in the south of Brazil just ahead of the national campaign also had a big influence on the way the campaign was implemented nationally, especially in relation to the active involvement of local state authorities and the central role that local radio and TV stations could play in mobilizing the population.¹⁰

Criminal holdings were not the primary target of the buyback campaign in Brazil, though restricted used weapons such as assault rifles, high-calibre pistols (.45 and 9 mm), and weapons with erased serial numbers were received in collection posts on a ‘no questions asked’ basis. Criminal small arms markets are primarily tackled by other components of the Statute such as the controls on and penalties for illicit carrying, the marking of lot numbers on high-calibre ammunition, new marking and tracing techniques requested from manufacturers, and the integration of police databases.¹¹

It is very important to understand that the buyback campaign in Brazil was not an isolated programme, but part of a practical disarmament plan in a crime prevention context. The Disarmament Statute goes beyond arms collection to encompass use, trade, and production control measures, as well as the disposal of collected weapons. As in Australia and the United Kingdom, the buyback programme must be understood against the background of the parallel implementation of tighter national control measures (Meek, 1998; Faltas, 2001; Reuter and Mouzos, 2003).

According to Ministry of Justice sources, the federal government assigned BRL 40 million (about USD 17 million) to pay compensation for guns handed in, of which BRL 32.7 million (USD 14 million) was spent in the first two phases of the campaign.¹²

Up to 29 July 2005, 387,085 small arms had been collected in the whole country as part of the buyback programme. This quantity is equal to 2.53 per cent of estimated private holdings, 5.72 per cent of estimated legal private holdings, 8.35 per cent of estimated private informal holdings, or 10 per cent of estimated criminal holdings (Dreyfus and De Sousa Nascimento, 2005, pp. 160, 164).

What was the profile of people submitting weapons? What kinds of weapons were collected, and what were the effects of the campaign in terms of violence reduction?

These questions will be answered through an analysis of the experience in Rio de Janeiro, a particularly violent state where most small arms-related problems are concentrated in the metropolitan area of its capital. It is a particularly interesting case, because it combines the joint actions of the government and an NGO, Viva Rio, which has been involved in violence reduction programmes for a decade.

Figure 1.1 **Small arms collected up to 29 July 2005, in absolute numbers (left) and rates per 100,000 population (right)**



Source: Ministry of Justice; federal police

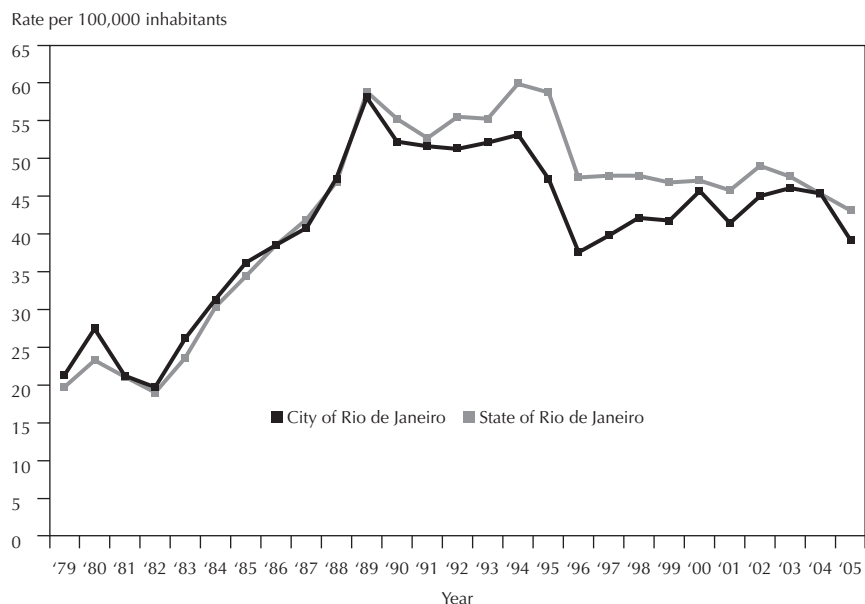
The buyback programme in Rio de Janeiro

The setting: a violent metropolis

More than five decades of neglect of social policies and of incoherent and inconsistent urban planning by successive state and municipal governments led to chaotic urban growth in the metropolitan area of the city of Rio de Janeiro. The area is characterized by overcrowding, poverty, and a lack of access to basic services, particularly in the northern and western neighbourhoods and suburbs. The lack of physical and institutional government presence favoured the rise in the early 1980s of drug-trafficking organizations that distributed and sold marijuana and cocaine. Drug-trafficking factions consolidated their influence and armed control over more than 681 slums (*favelas*) with an approximate population of 1.3 million people (IBGE, 2004).

The spiral of violence unleashed by armed competition between drug factions and police repression can be observed in Figure 1.2, which represents

Figure 1.2 **Firearms-related death rates in the state and city of Rio de Janeiro, 1979–2005**



Source: DATASUS/Ministry of Health; analysis by ISER

the evolution over time of firearm-related death rates in the state and city of Rio de Janeiro.

In 2004, 6,618 people were killed with firearms in the state of Rio de Janeiro, of whom 2,381 were killed in the city of Rio de Janeiro. This represents 43 per cent of deaths due to external causes in the city that year. In line with the rest of Brazil, most of these deaths are concentrated among young men aged between 15 and 29 years with low incomes and low levels of education. Within that risk group, firearm-related death rates are higher than in conflict zones such as the Gaza Strip, Liberia, and Sierra Leone (Downey, 2003). It is in this extremely violent context that the gun buyback campaign was implemented.

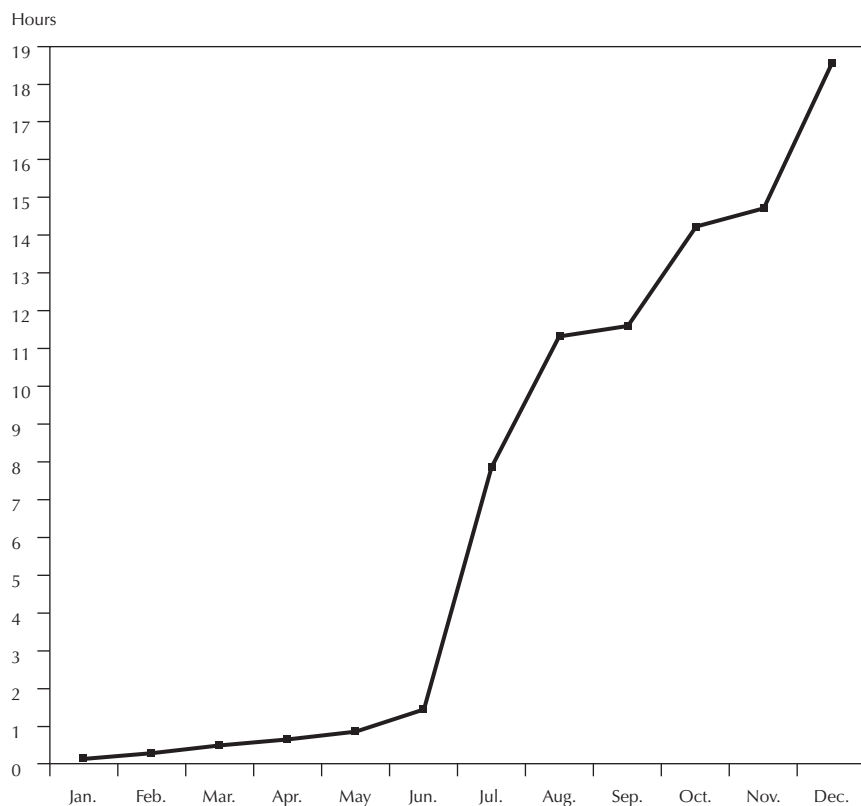
Local characteristics of the buyback campaign

The Rio de Janeiro-based NGO Viva Rio actively participated in all stages of the buyback campaign in that city, except for the final destruction of the weapons. Viva Rio has more than a decade's experience of advocating for disarmament and working on violence reduction programmes, and is very well respected among the population. It has established networks of contacts with the Christian, media (O Globo media holding), and law enforcement communities. The organization started working on the specific issue of small arms control in 1999 through the campaign 'Rio Put That Gun Down' ('Rio Abaixa Essa Arma'), which called for a new federal law banning the sale of firearms to civilians. In 2001 the organization developed a campaign addressing the role of women (wives, girlfriends, and mothers) in disarming their men. The organization was also involved in several massive public small arms destruction events and research projects in support of government gun control initiatives.

It is important to note that beyond the monetary incentives, people were mobilized by the momentum and sensitization created by civil society in partnership with local and federal government authorities and the mass media. Women—and, above all, mothers—proved to be a very important mobilizing force during the buyback campaign in 2003. The image of the association of mothers of firearm victims forming part of the leadership of disarmament

committees all over the country (but particularly in Rio) was very mobilizing.¹³ Sixteen per cent of men (2,069) who handed over small arms at Viva Rio collection posts said in a survey that they were convinced to do so by their wives. The percentage rises to 19 per cent among men who actually owned the gun (804). The number of women who handed over weapons at Viva Rio was 848. Of these, 6.5 per cent were the owners of the guns, while 17 per cent brought in weapons that belonged to deceased relatives (39.5 per cent to their fathers, grandfathers, or fathers-in-law, and 51.7 per cent to their husbands) (ISER, 2005).

Figure 1.3 **Television time dedicated to small arms control in the state of Rio de Janeiro, 2004**



Source: ISER

Another factor that persuaded people to hand over their guns was the active participation of the Catholic and Protestant churches, which not only gave official support to the campaign, but also allowed collection posts to be opened in churches, temples, and religious centres. This is particularly important in a very religious country where the Catholic Church tops the ranking of institutions in terms of credibility (IBOPE, 2004).¹⁴

The importance of the media should also be acknowledged, as Figure 1.3 demonstrates.

Viva Rio opened and administered some 60 collection posts in the city and neighbouring municipalities (located in police stations, schools, churches, Viva Rio's offices, and a mobile collection trailer). These posts were jointly administered by staff of the NGO and the federal police. At the end of each day, weapons were collected by federal police personnel and taken to the main federal police headquarters in the city. One interesting feature of the Rio de Janeiro buyback, which was replicated in São Paulo, is that collected weapons were disabled by hammering their barrels and firing mechanisms at the collection post in front of the person submitting the weapon. This method was aimed at preventing future diversions and leakages, but also served to increase confidence and enhance participation, since police forces in the state are perceived as very corrupt and trust in them is low (Lemgruber, Musumeci, and Cano, 2003, pp. 43–50).

Between 15 July 2004 and 29 July 2005, 40,050 small arms were collected in the state of Rio de Janeiro. This represents 2.5 per cent of the estimated private holdings in that state (1,559,386); 5 per cent of estimated legal private holdings (794,941); 8.7 per cent of the estimated informal holdings (458,351); or 11.6 per cent of estimated criminal holdings (346,094) (Dreyfus and De Sousa Nascimento, 2005).

What was the profile of people handing over small arms in Rio de Janeiro? We analysed the results of a voluntary survey of 3,010 people who submitted their guns at collection posts administered by Viva Rio. The results clearly reflected the goals of the campaign: to remove from circulation guns held by law-abiding citizens in order to reduce the risk of firearm-related deaths in the home.

The predominant participant group handing in guns was lower-middle-class and middle-class mature men. As Table 1.2 shows, there is a high degree of informality in the possession of the weapons (in more than 60 per cent of cases the guns were either not registered or their registration status was unknown). This may be related to the age of the majority of the people submitting the weapons (over 50 years of age), indicating that they may have purchased the weapon before 1997, when registration prior to purchase became mandatory.

Table 1.2 **Profile of people handing over guns in Rio de Janeiro**

| Why are you handing over this gun? | | |
|---|--------------|-------|
| Because of the economic compensation | 502 | 16.7% |
| In order to avoid punishment under the new law | 512 | 17.0% |
| So that it will not fall into the wrong hands | 2,154 | 71.6% |
| Fear of an accident | 1,341 | 44.6% |
| Fear of a tragedy in case of armed robbery | 972 | 32.3% |
| Someone in my family was a victim of gun violence | 131 | 4.4% |
| Other motives | 251 | 8.3% |
| Total questionnaires | 3,010 | |

Note: Each informant was allowed to list up to three motivations. The percentage figure for option 3 in the table, for example, should be interpreted as follows: 71.6 per cent of respondents selected option 3 as one of their motivations for handing over their guns. Therefore, the column on the right does not add up to 100 per cent.

| Was your gun registered? | | |
|-----------------------------|--------------|-------|
| Yes | 892 | 29.6% |
| No | 768 | 25.5% |
| I do not know | 1,350 | 44.9% |
| Total questionnaires | 3,010 | |

| Sex of people handing over guns | | |
|---------------------------------|--------------|-------|
| Male | 1,821 | 60.5% |
| Female | 748 | 24.9% |
| No answer | 441 | 14.7% |
| Total questionnaires | 3,010 | |

| Age group of people handing over guns | | |
|---------------------------------------|--------------|-------|
| 15–19 years | 12 | 0.4% |
| 20–24 years | 68 | 2.3% |
| 25–29 years | 101 | 3.4% |
| 30–39 years | 302 | 10.0% |
| 40–49 years | 515 | 17.1% |
| 50–59 years | 673 | 22.4% |
| 60 years or more | 1,147 | 38.1% |
| No answer | 192 | 6.4% |
| Total questionnaires | 3,010 | |

| Level of education of people handing over guns | | |
|--|--------------|-------|
| No education | 12 | 0.4% |
| 1–3 years in school | 56 | 1.9% |
| 4–7 years in school | 125 | 4.2% |
| 8–10 years in school | 234 | 7.8% |
| 11–13 years in school (high school completion) | 953 | 31.7% |
| 14 years in school or more (above high school) | 1,415 | 47.0% |
| No answer | 215 | 7.1% |
| Total questionnaires | 3,010 | |

| Monthly family income of people handing over guns | | |
|---|--------------|-------|
| Up to USD 100 | 55 | 1.8% |
| USD 101–300 | 278 | 9.2% |
| USD 301–500 | 384 | 12.8% |
| USD 501–1,000 | 672 | 22.3% |
| USD 1,001–2,000 | 762 | 25.3% |
| More than USD 2,000 | 547 | 18.2% |
| No answer | 312 | 10.4% |
| Total questionnaires | 3,010 | |

Not surprisingly, most of the weapons handed over at Viva Rio collection posts (we analysed a total of 8,534 weapons collected by 29 June 2005) are the kind of firearms that civilians are permitted by law (current and previous) to hold at home. These are low-calibre revolvers (60 per cent); hand shotguns (known as *garruchas*) (13 per cent); and low-calibre semi-automatic pistols (12 per cent). Fifty-three per cent of the weapons are Brazilian made, most of them Taurus revolvers; 85 per cent of Taurus revolvers have non-alphanumeric serial numbers (just numbers and no letters), indicating that they were manufactured before 1981, when the company started including letters in serial codes.

The sample is not very different from the types of small arms seized by the police from criminals in the last decade, except for one subtle but important difference. Among the seized small arms, 63 per cent of the arms are revolvers and 20 per cent—compared with 13 per cent in the collected arms sample—are high-calibre semi-automatic pistols, predominantly 9 mm restricted for civilian use (Rivero, 2005; ISER, 2005).

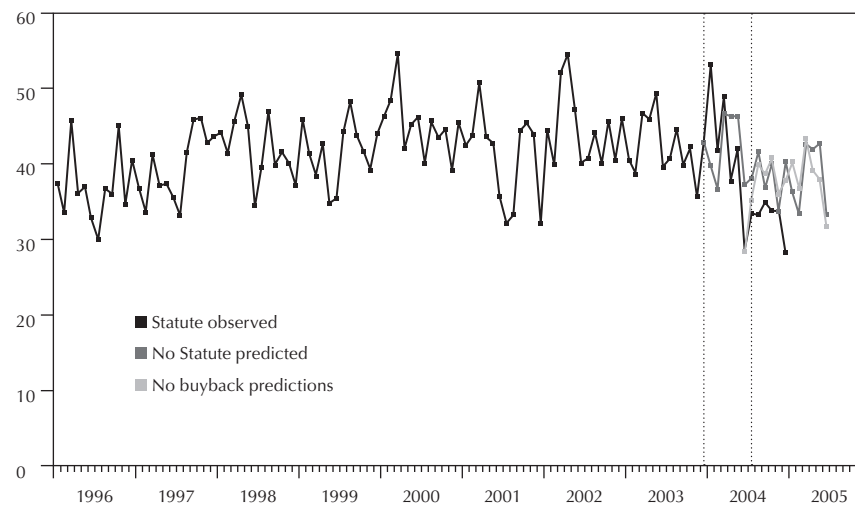
It is not the risk group involved in organized criminal activities that was handing over the guns. This was never the goal, as we explained before. Let us then assess the effect of the campaign on small arms-related deaths.

Assessing the results

To estimate the impact of the buyback campaign on violence-related indicators, this study uses an analytical approach that combines two complementary methodologies.

The first uses time prevision ARIMA (Box and Jenkins, 1976) models in order to predict the behaviour of a given indicator in the hypothetical case that neither the Statute nor the campaign had taken place. The prediction is calculated in the following way: the historical series for each indicator is 'interrupted' in December 2003 (approval of the Statute). From that point onwards the behaviour of the indicators is estimated according to the behaviour they displayed before the approval of the Statute; i.e. a prediction based on previous values is estimated onwards. The estimated series, which predicts the possible scenario without the Statute in place, can then be compared with the actual series. The easiest way of doing this is visually comparing them in order to gauge the differences between them (see Figure 1.4). In other words, 'Statute observed' (the black line) and 'no Statute predicted' (the grey line)

Figure 1.4 **Firearms-related homicide (FRH) rates per 100,000 inhabitants in Rio de Janeiro (city), 1996–April 2005**



Source: ISER, SIM-DATASUS

scenarios are contrasted. Exactly the same procedure was followed for the buyback campaign, but in this case the cut was made in July 2004 with 'no buyback predictions' (represented with a dotted line). In both cases, these temporal differences (represented with vertical grey lines perpendicular to the x-axis) were named Statute dummy and campaign dummy (CD) variables.

This simple graphic and visual depiction is not sufficient to affirm confidently whether the Statute and the campaign had an effect over the indicators of violence, however. A complementary methodology was therefore used to test the strength of the hypothesis (enhancing small arms control and taking guns out of circulation will reduce armed violence).

We used multivariate¹⁵ linear adjusted models to test the effect of the Statute and the campaign, together with other independent variables (co-variables, effort variables, and control variables). All possible combinations of variables were tested in this way. Those that were more significant¹⁶ are displayed in Tables 1.3–1.7. These tables allow the reader to see which are the more significant variables in relation to the variables of interest. The parameters of interest are the standardized effects of variables on the specific variable whose variation we seek to explain. This allows comparisons among the variables.¹⁷

Table 1.3 Effects of the variables on homicide rates

| | Model 01 | | | Model 02 | | | Model 03 | | | Model 04 | | |
|---|----------|--------|-----------------|----------|--------|-----------------|----------|--------|-----------------|----------|--------|-----------------|
| | B_PAD | t | P_Value | B_PAD | t | P_Value | B_PAD | t | P_Value | B_PAD | t | P_Value |
| Rate of collected weapons | | | | -0.400 | -2.896 | 0.007 | | | | -0.428 | -2.928 | 0.006 |
| Campaign dummy | -0.420 | -2.661 | 0.012 | | | | -0.481 | -3.135 | 0.004 | | | |
| Rate of time of campaign in media | | | | | | | | | | | | |
| Unemployment rate 15–17 years old | 0.346 | 2.195 | 0.036 | 0.443 | 3.212 | 0.003 | | | | | | |
| Unemployment rate 10+ years old | | | | | | | 0.272 | 1.770 | 0.087 | 0.355 | 2.429 | 0.021 |
| Unemployment rate 10+ (8ae) | | | | | | | | | | | | |
| Imprisonments for illicit arms carrying | | | | | | | | | | | | |
| Theft and robbery of firearms | | | | | | | | | | | | |
| | | | F = 12,901 | | | F = 13,875 | | | F = 11,566 | | | F = 10,736 |
| | | | P_Value = 0,000 | | | P_Value = 0,000 | | | P_Value = 0,000 | | | P_Value = 0,000 |
| | | | R2 = 0,454 | | | R2 = 0,472 | | | R2 = 0,427 | | | R2 = 0,409 |

| | Model 05 | | | Model 06 | | | Model 07 | | | Model 08 | | | Model 09 | | |
|--------|----------|-------|-----------------|----------|--------|-----------------|----------|--------|-----------------|----------|--------|-----------------|----------|--------|-----------------|
| | B_PAD | t | P_Value | B_PAD | t | P_Value | B_PAD | t | P_Value | B_PAD | t | P_Value | B_PAD | t | P_Value |
| | | | | -0.431 | -2.973 | 0.006 | | | | | | | -0.433 | -3.322 | 0.002 |
| -0.487 | -3.336 | 0.002 | | | | | -0.503 | -3.484 | 0.001 | | | | | | |
| | | | | | | | | | | -0.557 | -4.556 | 0.000 | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 0.303 | 2.075 | 0.046 | 0.362 | 2.497 | 0.018 | | | | | | | | | | |
| | | | | | | | -0.287 | -1.988 | 0.056 | | | | -0.232 | -1.683 | 0.102 |
| | | | | | | | | | | 0.370 | 3.027 | 0.005 | 0.330 | 2.467 | 0.019 |
| | | | | | | | | | | | | | | | |
| | | | F = 12,495 | | | F = 10,973 | | | F = 12,214 | | | F = 18,162 | | | F = 10,629 |
| | | | P_Value = 0,000 | | | P_Value = 0,000 | | | P_Value = 0,000 | | | P_Value = 0,000 | | | P_Value = 0,000 |
| | | | R2 = 0,446 | | | R2 = 0,414 | | | R2 = 0,441 | | | R2 = 0,524 | | | R2 = 0,499 |

Using this approach, we expected to be able to isolate the effects of other variables in order to efficiently measure the impact of the Statute and the campaign on the indicators of violence.

The first Box and Jenkins prediction-based methodology explained above was applied to each dependent variable shown in Tables 1.3–1.7, and led us to conclude in every case that the estimated series was bigger than the observed one. To simplify, the initial approach indicated to us that there was some difference after the Statute and the collection in the (violence) variables of interest. We then proceeded to gauge statistically using a multivariate model whether these effects could be attributed with statistical confidence to these two interventions. Tables 1.3–1.7 show only the variables that indicate lower growth than expected in the dependent variables for each model.

In relation to the FRH rates in the city of Rio de Janeiro, it is possible to visually verify the expressive difference between estimated and observed series. These differences apply both for the enactment of the Statute of Disarmament and for the national buyback campaign. These series were tested against several variables with the results shown in Tables 1.3–1.7.

The rate of collected weapons (TxAR) x 100,000 people in Rio de Janeiro showed a significant result (P Value is less than or equal to 0.1) in four models with a protection effect (it decreases death and injury risks). In three of these four cases, the TxAR was combined with variables of unemployment levels by age group (as a control variable). In the fourth case, TxAR was combined with imprisonments for illicit firearms carrying and firearms theft and robbery.

The campaign dummy (CD) was significant in a further four models when combined with the same unemployment variables and imprisonments for illicit arms carrying.

We also included a test using the mass media time dedicated to programmes and spots related to the campaign (TpEM) which was equally significant (model 8) when combined with the variable ‘firearms theft and robbery’. In all cases, TpEM had a high correlation with TxAR and CD.

Again, it is possible to observe an expressive difference between estimates and observed series. These differences apply in the case of the Disarmament Statute and the national buyback campaign. Several variables were tested, with the results given in Table 1.4.

Figure 1.5 Rates of hospitalization for attempted FRH per 100,000 inhabitants in the state of Rio de Janeiro, 2002–March 2005

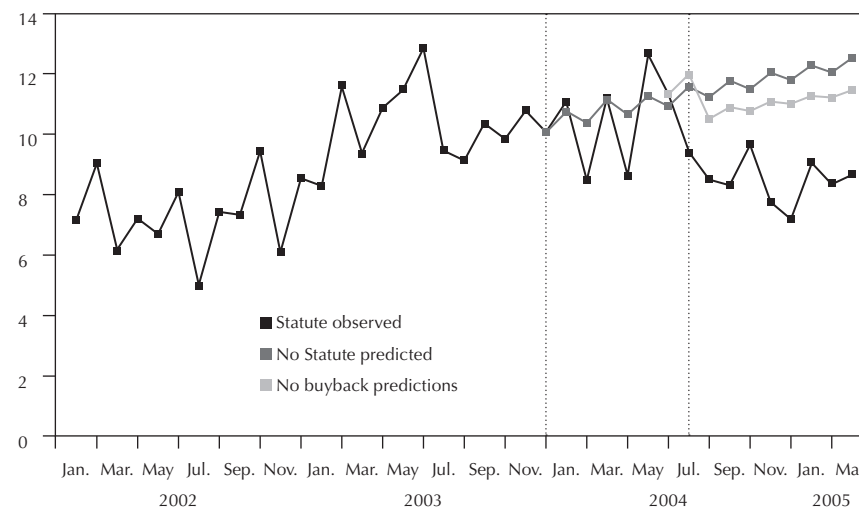


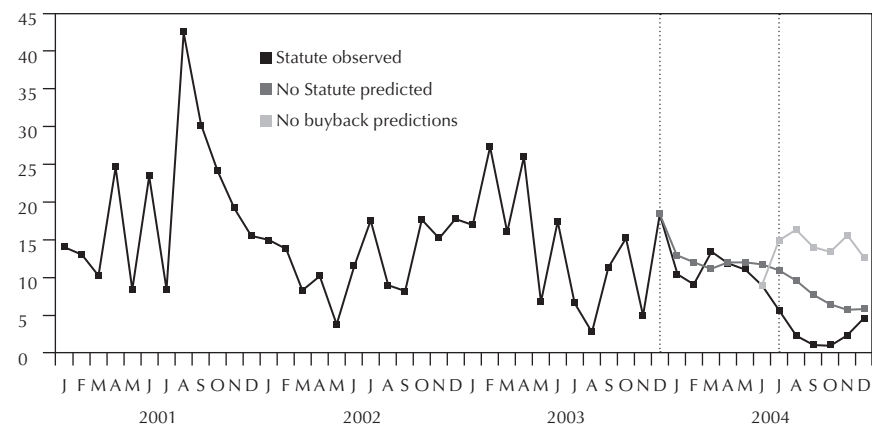
Table 1.4 Effects of the variables on rates of hospitalization for attempted firearm homicide

| | Model 01 | | | Model 02 | | |
|---|-----------------|---------|---------|-----------------|----------|---------|
| | B_PAD | t | P_Value | B_PAD | t | P_Value |
| Campaign dummy | -0.244 | -1.5207 | 0.137 | -0.302 | -1.80493 | 0.080 |
| Unemployment rate | | | | | | |
| Accumulated IGP* | | | | | | |
| Imprisonments for illicit arms carrying | | | | 0.408 | 2.439 | 0.020 |
| Theft and robbery of firearms | -0.358 | -2.2328 | 0.032 | | | |
| | F = 2,955 | | | F = 3,415 | | |
| | P_Value = 0,065 | | | P_Value = 0,044 | | |
| | R2 = 0,141 | | | R2 = 0,163 | | |

| Model 03 | | | Model 04 | | | Model 05 | | |
|-----------------|----------|---------|-----------------|--------|---------|-----------------|--------|---------|
| B_PAD | t | P_Value | B_PAD | t | P_Value | B_PAD | t | P_Value |
| -0.613 | -3.39426 | 0.002 | -0.524 | -3.630 | 0.001 | -0.792 | -5.007 | 0.000 |
| -0.540 | -3.14587 | 0.004 | -0.755 | -5.230 | 0.000 | -0.147 | -0.600 | 0.553 |
| | | | | | | 0.836 | 2.908 | 0.006 |
| 0.392 | 2.571 | 0.015 | | | | | | |
| F = 5,927 | | | F = 14,511 | | | F = 14,829 | | |
| P_Value = 0,002 | | | P_Value = 0,000 | | | P_Value = 0,000 | | |
| R2 = 0,357 | | | R2 = 0,468 | | | R2 = 0,574 | | |

* IGP = general price index

Figure 1.6 Rates of homicides and attempted homicides where the victim knew the assailant in the state of Rio de Janeiro, 2001–04



Source: Delegacia Legal, civil police, Rio de Janeiro

neighbours, lovers, etc.), the analysis suggests that there is a significant difference between the estimates made from the beginning of the Statute and the campaign onward. The adjustments are given in Table 1.5.

The two models in Table 1.5 show a significant (P Value is less than or equal to 0.1) relationship for TxAR and the CD.

Table 1.5 Effects of the variables on homicide and attempted homicide rates where the victim knew the assailant

| | Model 01 | | | Model 02 | | |
|-------------------------------|-----------------|--------|---------|-----------------|--------|---------|
| | B_PAD | t | P_Value | B_PAD | t | P_Value |
| Rate of collected weapons | | | | -0.281 | -1.885 | 0.066 |
| Campaign dummy | -0.478 | -3.801 | 0.000 | | | |
| Accumulated IGP* | | | | -0.287 | -1.925 | 0.061 |
| Theft and robbery of firearms | -0.247 | -1.961 | 0.056 | | | |
| | F = 9,063 | | | F = 7,079 | | |
| | P_Value = 0,000 | | | P_Value = 0,002 | | |
| | R2 = 0,287 | | | R2 = 0,239 | | |

* IGP = general price index

epidemics of violence that affect young men in Brazil. All these factors should be considered by policy-makers, particularly in Latin America, where the Brazilian experience is more likely to be used as a model. 📄

Chapter 2

The Value of the Illegal Firearms Market in Rio de Janeiro City: The Economic and Symbolic Value of Guns in Crime

Patricia Silveira Rivero

Introduction

The aim of this chapter is to ascertain the volume and price of firearms in the criminal market of the city of Rio de Janeiro, together with the symbolic value that they have for those who use them. It reveals the main changes in the country of manufacture, type, calibre, and make of firearms used in crime in Rio de Janeiro, and identifies the prices at which these weapons are negotiated in criminal markets. It compares prices in the criminal market with prices in the legal market, and examines the variables that can interfere with variations in prices in the criminal market, in order to identify:

- which of the firearms that are used in crimes are also used by the military police, the civil police, or the armed forces (marines, air force, and army);
- which firearms are most valued by criminals; and
- what factors influence the differential value of firearms in the criminal market in Rio de Janeiro.

The study arrives at an estimate for the total economic value of the criminal firearms market in Rio de Janeiro city. Finally, it analyses the meanings that social actors involved in the use of firearms in the *favelas* attribute to these weapons to determine whether symbolic interpretations that influence prices serve to prolong armed conflicts.¹⁸

The period of study is 1951 to 2003. The start date was chosen because it is the first year for which data on seized firearms in Rio de Janeiro state is available. The end date is the year Brazil's Disarmament Statute was approved. The Statute stiffens penalties for owning or using guns illegally; increases the

background checks on people wanting to buy a gun; bans firearms sales to the under 25s; and makes it illegal for anyone unconnected with the security forces to carry a firearm, with the exception of members of legally organized sport shooting clubs. It is conceivable that the Statute will not only have an impact on the regulated firearms market, but on the illegal market as well.

The main findings of this study include the following:

- The volume of guns seized by police in Rio has increased substantially over the period of study, 1951–2003.
- There are 4.3 firearms for every ten men between 15 and 65 years of age in Rio de Janeiro city.
- Foreign-made weapons are increasing as a proportion of all seized guns.
- Licensed weapons are increasing as a proportion of all seized guns.
- Rio guns are highly ‘criminalized’: one in six will be used to commit a crime.
- The total value of the illicit firearms market in Rio during the period 1993–2003 is BRL 158 million (USD 88 million), more than double the direct cost of violence in Rio in 1995.

The criminal market in Rio de Janeiro: firearms as political merchandise

Sociological analyses of Rio de Janeiro historically characterize the city as having high levels of illegality, a place where people are employed illegally, and businesses and products are negotiated through crime (Rivero, 2000). Other analyses extend this attribution of illegality beyond Rio to all of Brazil, particularly in the economic sphere (Dos Santos, 1993). It is not surprising that in a context favourable to the deregulation of economic exchanges, firearms would be negotiated illegally.

Firearms are used habitually in the *favelas*, mainly by different drug-trafficking factions as a way to guarantee and affirm their territorial power, which in turn permits them to trade freely in drugs. To do this, they must confront both the police and other drug-trafficking factions. This situation leaves the *favelas* of Rio de Janeiro in a state of permanent armed conflict.¹⁹ As a result,

Rio de Janeiro has one of the highest rates of gun death in the country, and its *favelas* have gun death rates comparable to those of countries at war (Phebo, 2005).

In order to study economic transactions involving firearms in *favelas*, it is necessary to look at the characteristics of one specific type of market, the criminal market. This market combines ‘political and economic dimensions, in such a way that a *political* resource (or a cost) metamorphoses into a value of exchange’ of political merchandise (Misse, 1997, p. 113).²⁰ In other words, the price of firearms that are diverted and negotiated crimes depends not only on the laws of the market, but also on strategic evaluations of power and of the potential recourse to violence. In this way, firearms become to a certain degree independent of the laws of the market.

The criminal firearms market is not regulated. In addition to its accentuated political dimension, it differs from informal markets because the latter have some form of normative or social legitimization.

A further characteristic of transactions in the criminal firearms market is that they compete with the state and counter it, since they undermine the state’s monopoly on the legitimate use of force. This becomes clear in the turf wars of drug traffickers in Rio de Janeiro’s *favelas*. Corruption—another form of ‘political merchandise’—may also enter into the equation. Thus the use of force, which was the monopoly of the state, is expropriated from it, whether by members of the state (through corruption) or by individuals who are external to the state (the large contraband transactions of arms that end up in Rio’s *favelas*, by land or by sea).²¹

Unconventional methods: data on firearms, prices, and symbols

This study relies on a combination of quantitative and qualitative methods. It uses the database of weapons seized by the Division of Oversight on Arms and Explosives of the Civil Police of Rio de Janeiro (Divisão de Fiscalização de Armas e Explosivos da Polícia Civil do Rio de Janeiro—DFAE). It replicates the methodology used in a nationwide study of the number of criminal firearms in circulation as a proportion of the total number of firearms, and applies it to the number of guns in circulation in Rio de Janeiro city (see Dreyfus and

De Sousa Nascimento, 2005). The step-by-step methodology used is described in Methodological annex I.

Qualitative research techniques are used to calculate the value of firearms in criminal markets using information provided by youth consultants from *favelas* and police who do operational work in *favelas*. Both groups have direct knowledge of firearms transactions by criminals in Rio de Janeiro *favelas*. The 39 police were interviewed in focus groups, while the three youth consultants were interviewed individually and their life histories collected over several months. The longer working period created space for dialogue and communication (Methodological annex II). The information gathered was compared with prices of weapons of the same type, model, and calibre in legal markets at the national and international levels.²² This allowed us to identify characteristics specific to criminal markets.

A third phase of research attempted to assess the meaning of firearms for the people who use them or who are closest to them in the *favelas*. Here we used subjective questions on the feelings and sensations associated with the weapons and their use (Methodological annex III). We also sought information on the characteristics attributed to the conflict in which these weapons are used.

Finally, we conducted interviews with civil police officers who guard arms stockpiles and with federal police officers who manage data on seized firearms, although very little information that could be used in this study was obtained in this way.

The 'Marvellous City' and its firearms

It is possible to arrive at estimates for the level of crime guns in circulation per capita by first isolating the firearms that were seized in Rio de Janeiro city from the state-wide database of weapons seized by the DFAE of the civil police of Rio de Janeiro. We then focused on guns that were involved in crime (Methodological annex I), and compared these with demographic data. Since the main victims of gun deaths in Brazil are young men (between 15 and 29 years of age), the city's male population above 15 years of age was used as a basis for these calculations. In order to arrive at the number of crime guns

Table 2.1 **Crime guns per male resident in Rio de Janeiro city**

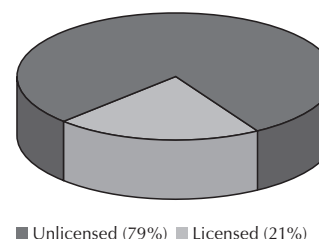
| Estimated number of firearms in circulation in Rio de Janeiro city | Estimated number of crime guns in circulation in Rio de Janeiro city | Number of male residents in Rio de Janeiro city (15–65 years of age) | Number of guns per male resident (15–65 years of age) | Number of crime guns per male resident (15–65 years of age) in Rio de Janeiro city |
|--|--|--|---|--|
| 928,621 | 159,723 | 2,130,062 | 43.6 guns per 100 male residents | 7.5 guns per 100 male residents |

per male resident in Rio de Janeiro (last column of Table 2.1), we applied the estimated percentage of crime guns (17.2 per cent) calculated using the methodology devised in the previous nationwide study to the total number of guns per male resident among the target population (see Methodological annex I).

As Table 2.1 shows, there are 43.6 guns for every 100 men aged 15–65 in the city, and 7.5 guns per 100 male residents are used to commit crimes. Firearms are quite widely available in Rio, and the chance of these weapons being used in crimes is one in six.

We also examined the possibility that these crime guns were diverted from legal markets. Of the total number of crime guns seized in the city of Rio de Janeiro in the period 1951–2003, 21 per cent were found to have been licensed at some point, while 79 per cent were unlicensed.

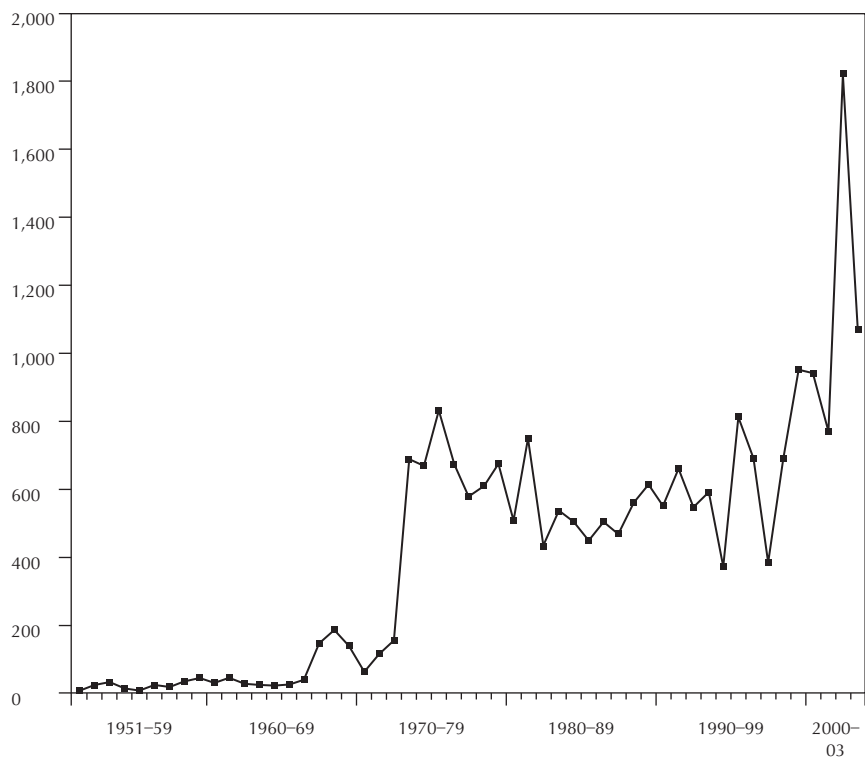
Figure 2.1 **Licensed and unlicensed crime guns seized in the city of Rio de Janeiro, 1951–2003**



Diverted guns that were used to commit a criminal act were more likely to have been channelled through criminal markets. Figure 2.2 shows the patterns of diversion from the legal market to criminal markets over time.

The diversion of legal firearms to crime in the city began to increase dramatically from 1972, with high points in 1975 and 1980. This coincides with the onslaught of drug-trafficking activities on a massive scale in Rio's *favelas*, especially trafficking of marijuana. Another important increase occurred in

Figure 2.2 Licensed firearms seized in criminal activities in Rio de Janeiro city, 1951–2003



1981–82, when trafficking cocaine became more widespread. Diversion of firearms to criminal elements continued from then on, reaching a peak during the 1990s.

Along with the increases in gun-related crime and the diversion of weapons, we see a clear tendency among the groups that control trafficking in the city to increase the firepower of their weapons. This increase is both quantitative (greater numbers of firearms) and qualitative (more weapons with greater firepower). This finding resonates with the analysis provided by interviewees from the police and *favelas* who suggest that the introduction of repressive and confrontational public security policies contributed to an increase in firearms and firepower in the hands of criminals as police and drug traffickers sought to match the firepower of their opponents. This relates to the growing

Table 2.2 Seized firearms used in crimes over time, by manufacturing country, 1951–2003

| Manufacturing country | 1951–80 | | 1981–92 | | 1993–2003 | |
|-----------------------|---------------|-------|---------------|-------|---------------|-------|
| | Number | % | Number | % | Number | % |
| Brazil | 17,626 | 72.10 | 23,966 | 79.76 | 27,764 | 75.12 |
| United States | 1,843 | 7.54 | 2,203 | 7.33 | 3,835 | 10.38 |
| Argentina | 379 | 1.55 | 576 | 1.92 | 1,053 | 2.85 |
| Spain | 1,718 | 7.03 | 989 | 3.29 | 923 | 2.50 |
| Belgium | 1,714 | 7.01 | 1,122 | 3.73 | 760 | 2.06 |
| Italy | 450 | 1.84 | 340 | 1.13 | 375 | 1.01 |
| Germany | 405 | 1.66 | 437 | 1.45 | 668 | 1.81 |
| Czech Republic* | 159 | 0.65 | 125 | 0.42 | 178 | 0.48 |
| France | 87 | 0.36 | 64 | 0.21 | 60 | 0.16 |
| Home-made | 7 | 0.03 | 163 | 0.54 | 320 | 0.87 |
| Austria | 37 | 0.15 | 23 | 0.08 | 423 | 1.14 |
| United Kingdom | 19 | 0.08 | 13 | 0.04 | 10 | 0.03 |
| Poland | 1 | 0.00 | 1 | 0.00 | 1 | 0.00 |
| Israel | – | – | 23 | 0.08 | 164 | 0.44 |
| Japan | – | – | 1 | 0.00 | 1 | 0.00 |
| China | – | – | – | – | 310 | 0.84 |
| Russia** | – | – | – | – | 60 | 0.16 |
| Switzerland | – | – | – | – | 19 | 0.05 |
| Chile | – | – | – | – | 15 | 0.04 |
| Sweden | – | – | – | – | 8 | 0.02 |
| Egypt | – | – | – | – | 7 | 0.02 |
| Korea | – | – | – | – | 3 | 0.01 |
| Philippines | – | – | – | – | 1 | 0.00 |
| Yugoslavia | – | – | – | – | 1 | 0.00 |
| Total | 24,445 | | 30,046 | | 36,959 | |

* Includes Czechoslovakia before its break-up.

** Includes the Soviet Union and the post-Soviet Russian Federation.

demand for firearms in the city due to the type of conflicts taking place in Rio. It may also be related to corruption within public or private security bodies, and to increased theft of firearms: as the profits from drug trafficking grew, so too did money available for bribes and for coordinating robberies, facilitated by the lack of control over weapons stockpiles in the city.

Table 2.2 presents data on seized firearms used in crimes over time, and indicates the country in which they were manufactured.

An extremely high number of firearms seized in criminal activities are Brazilian made. The proportion of Brazilian-made weapons increased considerably in the second period, 1981–92, following increases in drug trafficking in the city. The percentage of US-made firearms in criminal hands is the second-highest; though it is far lower than Brazilian-made weapons. US-made firearms tend to increase over time, as Figure 2.2 shows. A large part of the firearms from the United States are automatic pistols and assault rifles, which are highly lethal. Argentine-made firearms appear in third place, confirming that firearms from bordering countries are used to commit crimes in Rio. After that come Spanish weapons, many used in the Spanish Civil War.

Figure 2.3 reveals the countries of manufacture of firearms used in criminal activities in Rio de Janeiro city from 1993 to 2003.

Figure 2.3 **Profile of seized weapons used in criminal activities in Rio de Janeiro city, by country of origin, 1993–2003**

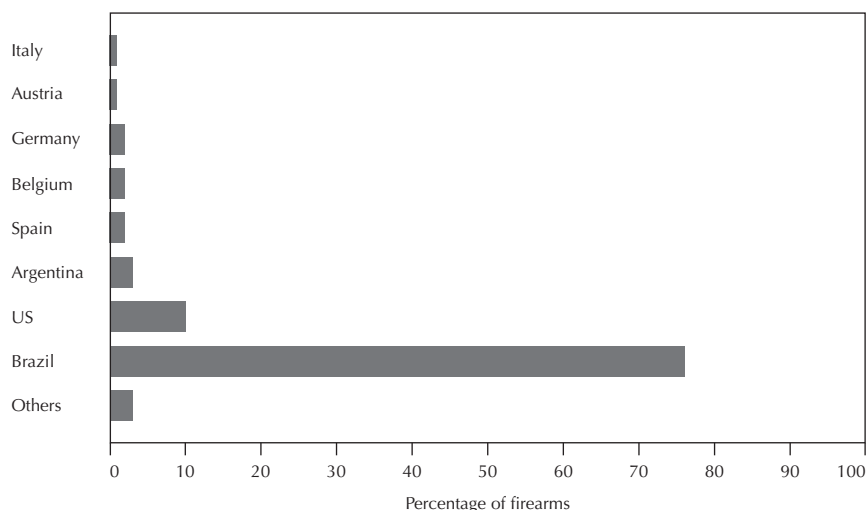
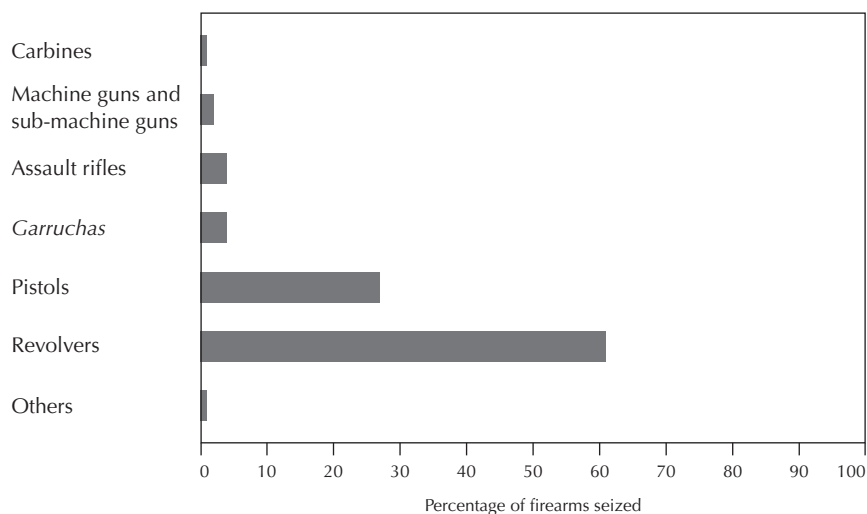


Table 2.3 **Profile of firearms seized in crimes in Rio de Janeiro city, by type and period, 1951–2003**

| Type | 1951–80 | | 1981–92 | | 1993–2003 | |
|---------------------------------|---------------|-------|---------------|-------|---------------|-------|
| | Number | % | Number | % | Number | % |
| Revolvers | 16,868 | 69.00 | 23,197 | 77.20 | 22,402 | 60.61 |
| Pistols | 3,495 | 14.30 | 3,802 | 12.65 | 9,865 | 26.69 |
| <i>Garruchas</i> | 378 | 1.54 | 1,080 | 3.60 | 1,617 | 4.38 |
| Single-shot shotguns | 3,433 | 14.04 | 953 | 3.17 | 264 | 0.71 |
| Carbines | 196 | 0.80 | 627 | 2.09 | 466 | 1.26 |
| Machine guns | 12 | 0.05 | 97 | 0.32 | 442 | 1.20 |
| Sub-machine guns | 8 | 0.03 | 77 | 0.26 | 192 | 0.52 |
| <i>Garruchões</i> ²³ | 17 | 0.07 | 56 | 0.19 | 23 | 0.06 |
| Sawn-off shotguns | 4 | 0.02 | 43 | 0.14 | 25 | 0.07 |
| Assault rifles | 7 | 0.03 | 38 | 0.13 | 1,579 | 4.27 |
| Rifles | 17 | 0.07 | 27 | 0.09 | 11 | 0.03 |
| Home-made | – | – | 5 | 0.02 | 22 | 0.06 |
| Bolt-action rifles | 2 | 0.01 | 14 | 0.05 | 9 | 0.02 |
| Pen guns | 1 | 0.00 | 2 | 0.01 | 4 | 0.01 |
| Bazookas | – | – | 4 | 0.01 | 9 | 0.02 |
| Grenade launchers | – | – | – | – | 2 | 0.01 |
| Rocket launchers | – | – | – | – | 1 | 0.00 |
| Others | 6 | 0.02 | 19 | 0.06 | 16 | 0.04 |
| No information | 1 | 0.00 | 5 | 0.02 | 10 | 0.03 |
| Total | 24,445 | | 30,046 | | 36,959 | |

Figure 2.4 **Firearms seized in criminal activities in Rio de Janeiro city, by type, 1993–2003**



In terms of type of small arm, Table 2.3 shows that revolvers are the weapons most frequently seized by police in Rio, though they decreased in the most recent period. Pistols also appear in significant proportions: the number of seized pistols decreased in the second period, but grew markedly in the most recent. There was a continuous growth in *garruchas*, which are older weapons, particularly in the second period. Single-shot shotguns, on the other hand, decreased dramatically. The increase in assault rifles over the different periods, and especially in the most recent, is very clear. The number of sub-machine guns also increased markedly. The growth of these last two types of firearms follows the entry of cocaine into the *favelas* of Rio de Janeiro, as well as the growth of armed violence in the city.

The shift in the most recent period towards weapons with higher firepower and greater lethality appears clearly in Figures 2.5 and 2.6. Figure 2.5 reveals the growth in seized pistols in relation to revolvers. Figure 2.6 shows the growth in assault rifles, which are associated with international armed conflicts and have symbolic value as weapons of war.

Information on types of weapons used and their respective lethality is crucial for developing effective security policies dealing with disarmament; control of trafficking; security in border regions; controls on importation, production,

Figure 2.5 **Percentage variation of revolvers and pistols seized in criminal activities in Rio de Janeiro city, 1951–2003**

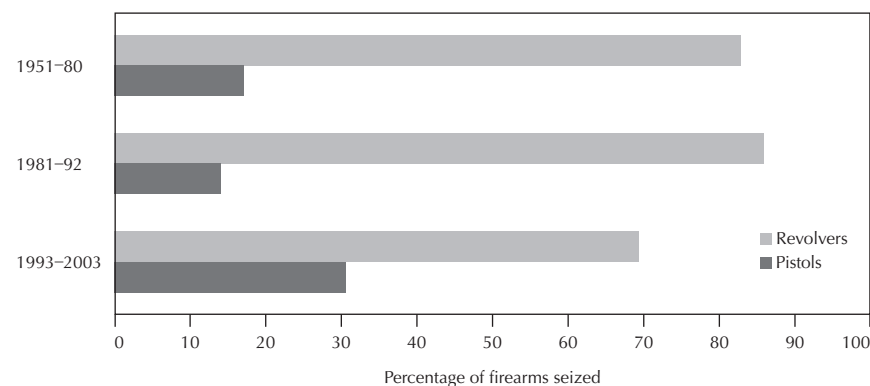
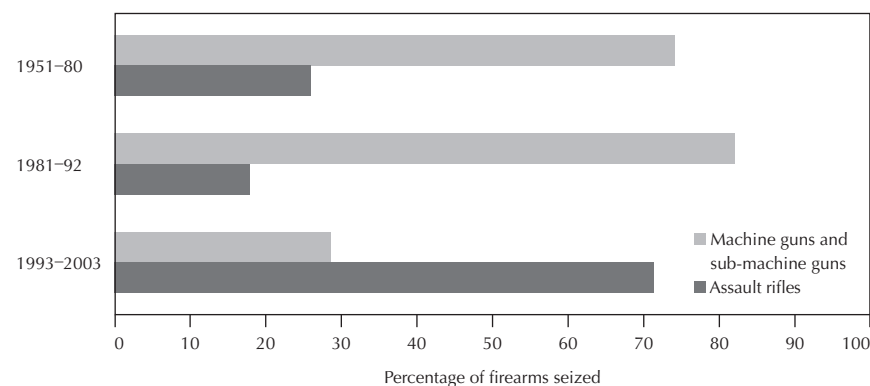


Figure 2.6 **Percentage variation of assault rifles, sub-machine guns, and machine guns seized in Rio de Janeiro city, by period, 1951–2003**



and commerce of firearms; and control of stocks belonging to national security forces. Pistols and assault rifles experienced highest growth rates in criminal activities over the past decades. Their characteristics are explored in Figures 2.7 and 2.8.

Brazilian-made pistols clearly predominate, and have increased in prevalence over time. Increases are mainly noted among pistols of calibres whose use is restricted to the police and military forces. These automatic weapons have high levels of firepower and lethality and were either diverted within the national territory or in triangulation with importer countries, probably neighbouring countries. In the past decade, the number of pistols made in the

Figure 2.7 Pistols seized in crimes in Rio de Janeiro city, by calibre and brand, 1993–2003

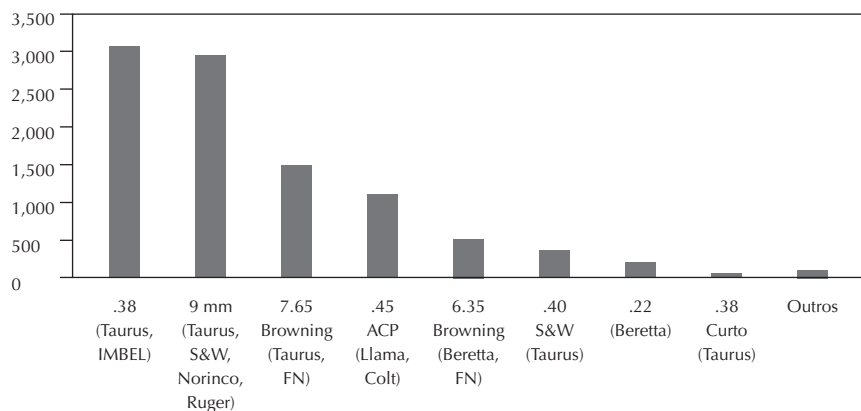
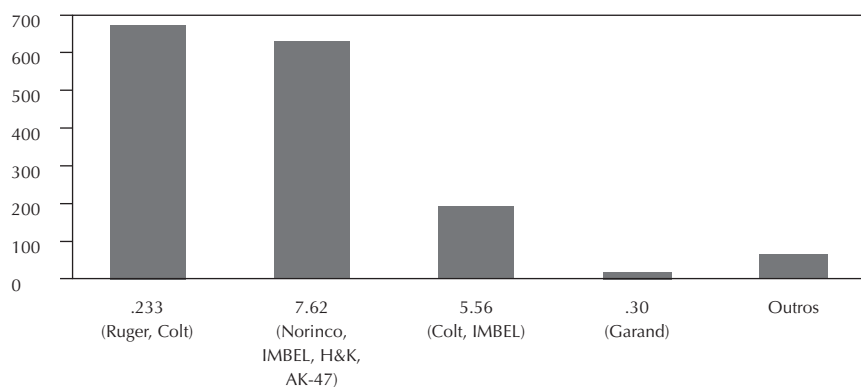


Figure 2.8 Assault rifles seized in Rio de Janeiro city, by calibre and brand, 1993–2003



United States (Smith & Wesson—S&W, Ruger, Colt), China (Norinco), Belgium (FN), and Spain (Llama) has also increased.

A true picture of changes in seized assault rifles only emerges in the past decade, when the number of these among arms seized in criminal activities was at a peak.

In contrast to pistols, there is a clear predominance of foreign-produced brands among assault rifles. The majority are from the United States, followed by China, Germany, and Russia (the Soviet Union and the Russian Federation).

All are AK-47s or copies of this model. IMBEL assault rifles, use of which is restricted to the army and the military police, are also found in increasing numbers among firearms seized in criminal activities in the city. The characteristics of these assault rifles lend credibility to the hypothesis that they were diverted or stolen from the national security forces. Their origin reveals problems with contraband and trafficking of firearms through unprotected borders and ports or airports. Therefore, this data points to the existence of international and national criminal networks that are facilitated by corruption at the national level.

The value of firearms: prices and variations

Prices and meanings of firearms in Rio’s criminal markets were researched by comparing average prices in illegal and legal markets and establishing rates of variation. The objective was to understand and describe the possible rules at work in the criminal firearms market. These include economic values, meanings and values attributed subjectively, and the impact on the dynamics of power.

It is important to note that the information on crime guns and the study of prices of weapons in *favelas* could suffer bias based on the interviewees’ knowledge and preferences. Distortions could also be introduced by working with average prices when the rates of variation in prices and extreme values are very high (Methodological annex III).

Table 2.4 presents data on firearms and their prices in criminal and legal markets, in Brazilian reals and US dollars (at 2003 rates of conversion of USD 1 to BRL 3.1). The rates of variation in prices were also calculated for criminal and legal markets, in order to establish a comparison between them. The last column contains information on the relationship among firearms, prices, and the public security forces that use them. Tables 2.5 and 2.6 offer a condensed version of Table 2.4, showing average prices of firearms in the criminal market and legal market, respectively, by type of weapon.

The average of the average prices in the criminal market (BRL 3,972) is higher than the average of the average prices of the legal market (BRL 1,925). A closer look at the figures gives the following results:

Table 2.4 Firearms prices of specific weapons in the criminal and legal markets, 2003

| Calibre | Type | Make/model | Av. price crim. market (BRL) | Av. price crim. market (USD) | Rate of var. crime (%) | Av. legal price (USD) | Rate of var. legal (%) | Security forces |
|---------|-----------|-------------|------------------------------|------------------------------|------------------------|-----------------------|------------------------|---|
| .40 | Pistol | S&W | 1,450 | 467.74 | 80 | 403–1,208 | 66.7 | n/a |
| 9 mm | Pistol | FN | 1,280 | 412.90 | 80 | 399 | 0 | n/a |
| 9 mm | Sub-mach. | INA-IMBEL | 3,033.33 | 978.49 | 80 | n/a | n/a | Military police |
| 9 mm | Sub-mach | Beretta | 4,066.66 | 1,311.83 | 80 | 600–700 | 14.3 | Military police, civil police, all armed forces |
| 9 mm | Pistol | Browning | 1,366.60 | 440.84 | 76 | 568–683 | 16.8 | n/a |
| 9 mm | Pistol | S&W | 1,260 | 406.45 | 75 | 403–1,208 | 66.7 | n/a |
| 9 mm | Pistol | IMBEL | 1,033.33 | 333.33 | 75 | 462.01–427.94 | 7.4 | Armed forces |
| 9 mm | Sub-mach. | Taurus MT12 | 5,000 | 1,612.90 | 71.4 | 600–700 | 14.3 | Military police, civil police, all armed forces |
| 9 mm | Sub-mach. | Uzi | 3,333 | 1,075.16 | 71.4 | 550 | 0 | Civil police |
| 9 mm | Pistol | Walther | 0 | 0 | 70 | 609.95 | 0 | n/a |
| .38 | Revolver | Rossi | 586 | 189.03 | 70 | n/a | n/a | n/a |
| 9 mm | Pistol | Taurus | 1,314 | 423.87 | 68 | 452.12 | 0 | Civil police, marines, navy |

| | | | | | | | | |
|------|------------|-------------|----------|----------|------|-----------|------|---|
| 9 mm | Pistol | Beretta | 1,243.75 | 401.21 | 68 | 566–966 | 41.4 | n/a |
| 9 mm | Pistola | SIG Sauer | 1,575 | 508.06 | 68 | 744–2,344 | 68.1 | n/a |
| .38 | Revolver | Bagual | 350 | 112.90 | 67 | n/a | n/a | n/a |
| .40 | Pistol | Taurus | 1,600 | 516.13 | 60 | n/a | n/a | Military police, civil police, highway police |
| 9 mm | Pistol | Glock | 1,667 | 537.74 | 60 | 528.95 | 0 | Civil police |
| 9 mm | Pistol | Ruger | 1,325 | 427.42 | 60 | 368–449 | 18 | n/a |
| 9 mm | Pistol | Colt | 1,325 | 427.42 | 60 | 648 | 0 | Civil police |
| 9 mm | Pistol | Bersa | 925 | 298.39 | 60 | n/a | n/a | n/a |
| .357 | Revolver | Rossi | 667 | 215.16 | 60 | n/a | n/a | n/a |
| .223 | Ass. rifle | HK | 10,000 | 3,225.81 | 58.3 | 1,058 | 0 | Civil police, marines |
| 7.62 | Ass. rifle | SIG Sauer | 8,200 | 2,645.16 | 58.3 | n/a | n/a | n/a |
| .223 | Ass. rifle | AK-47 | 7,500 | 2,419.35 | 20 | 115–525 | 78 | Civil police |
| 5.56 | Ass. rifle | Colt | 9,000 | 2,903.23 | 58.3 | 967–1,174 | 17.6 | Civil police, military police, navy |
| 7.62 | Ass. rifle | Norinco | 8,600 | 2,774.19 | 58.3 | n/a | n/a | n/a |
| .223 | Ass. rifle | FN FAL | 7,666.66 | 2,473.12 | 50 | n/a | n/a | Civil police |
| 7.62 | Ass. rifle | IMBEL (FAL) | 7,800 | 2,516.13 | 50 | n/a | n/a | Civil police, military police, army, navy |

| | | | | | | | | |
|---------|-------------|-------------|----------|----------|------|---------|-------|-------------------------------|
| 7.62 | Ass. rifle | AK-47 | 7,000 | 2,258.06 | 50 | n/a | n/a | Civil police |
| 7.62 | Machine gun | FN | 13,000 | 4,193.55 | 50 | n/a | n/a | n/a |
| .38 | Revolver | Taurus | 388 | 125.16 | 50 | n/a | n/a | n/a |
| .32 | Revolver | Taurus | 300 | 96.77 | 50 | n/a | n/a | n/a |
| 22LR | Revolver | Taurus | 225 | 72.58 | 50 | n/a | n/a | n/a |
| .357 mg | Revolver | Taurus | 467 | 150.65 | 50 | n/a | n/a | n/a |
| .32 | Revolver | INA | 150 | 48.39 | 50 | n/a | n/a | n/a |
| .32 | Revolver | Rossi | 300 | 96.77 | 50 | n/a | n/a | n/a |
| 22LR | Revolver | Rossi | 225 | 72.58 | 50 | n/a | n/a | n/a |
| .357 | Pistol | Taurus | 433.44 | 139.82 | 46.7 | n/a | n/a | n/a |
| .38 | Revolver | S&W | 600 | 193.55 | 43 | n/a | n/a | n/a |
| 5.56 | Ass. rifle | FN | 6,333.33 | 2,043.01 | 40 | n/a | n/a | n/a |
| .223 | Ass. rifle | FAMAE | 10,000 | 3,225.81 | 40 | n/a | n/a | n/a |
| .38 | Revolver | INA | 200 | 64.52 | 40 | n/a | n/a | n/a |
| .223 | Ass. rifle | Ruger | 4,785.71 | 1,543.78 | 33.3 | 460-679 | 32.33 | Civil police |
| 9 mm | Pistol | Springfield | 1,750 | 564.52 | 28.6 | 425-735 | 42.2 | n/a |
| 5.56 | Ass. rifle | FAL | 8,750 | 2,822.58 | 28.6 | n/a | n/a | Military police, civil police |
| 7.62 | Ass. rifle | HK G3 | 9,375 | 3,024.19 | 28.5 | 1,058 | 0 | Civil police |

| | | | | | | | | |
|----------|------------|-----------------------|--------|----------|------|-----------|------|--------------|
| 9 mm | Pistol | CZ | 2,250 | 725.81 | 25 | 365-448 | 18.5 | n/a |
| 9 mm | Pistol | Star | 450 | 145.16 | 25 | 265 | 0 | n/a |
| 9 mm | Pistol | Tanfloglio | 2,250 | 725.81 | 25 | 336.95 | 0 | n/a |
| 9 mm | Pistol | Jericho | 2,250 | 725.81 | 20 | n/a | n/a | n/a |
| 9 mm | Pistol | HK | 2,250 | 725.81 | 20 | 2,600 | 0 | n/a |
| 9 mm | Pistol | FAMAE | 2,250 | 725.81 | 20 | 744-2,334 | 68.1 | n/a |
| .45 | Pistol | Colt | 900 | 290.32 | 20 | 649.95 | 0 | Civil police |
| 7.62 ACP | Ass. rifle | Norinco | 9,000 | 2,903.23 | 20 | 245 | 0 | n/a |
| .223 | Ass. rifle | Armalite AR (US/UK) | 9,000 | 2,903.23 | 20 | 806-1,205 | 33.1 | n/a |
| .357 | Pistol | Desert Eagle | 2,750 | 887.10 | 20 | 695-800 | 13.1 | n/a |
| .357 | Pistol | Coonam | 2,750 | 887.10 | 20 | 875-2,499 | 64.9 | n/a |
| 7.62 | Ass. rifle | AKM | 11,000 | 3,548.39 | 16.7 | n/a | n/a | n/a |
| 9 mm | Sub-mach. | Uru (Submetralhadora) | 5,500 | 1,774.19 | 16.7 | n/a | n/a | n/a |
| 9 mm | Sub-mach. | Star | 6,500 | 2,096.77 | 16.7 | n/a | n/a | n/a |
| 9 mm | Sub-mach. | FMK | 6,000 | 1,935.48 | 16.7 | n/a | n/a | n/a |
| 9 mm | Sub-mach. | Tipo Ingram | 6,500 | 2,096.77 | 14.3 | n/a | n/a | n/a |
| .380 | Pistol | Taurus | 760 | 245.16 | 13 | n/a | n/a | n/a |

symbolic value of these arms is explained in the qualitative part of this study. On the other hand, their specificity (they are normally used in conflict situations) might make these weapons less sought after in the legal market, hence lowering prices in this market.

- **Revolvers** are more expensive in legal than in criminal markets, but they are much cheaper than pistols. Their low price is explained by the quantity of them circulating in the criminal market (Figure 2.4 shows that they comprise 61 per cent of total firearms seized in criminal activities). There is less price variation in the legal market than in the criminal market, where the type of revolver (generally obsolete or very old) and the fact that the negotiated weapon is usually second-hand contribute to reducing costs. Further, as is supported by the interviews and focus groups, in the criminal market there is a subjective devaluation of revolvers in relation to automatic firearms, which have greater firepower and a heavier appearance. Variations do exist in the legal market, especially for revolvers that are valued by collectors.

The rates of price variation in the legal market are smaller than those in criminal markets. This confirms that the criminal firearms market is more heterogeneous than the legal market. The rates of variation are greater for certain types of weapons:

- **Pistols** are subject to the greatest rates of variation in price in the criminal market: 60–80 per cent in the majority of cases and 20 per cent in the case of the least variation.
- There are similar variation rates for **sub-machine guns and machine guns**: 70–80 per cent in the majority of cases.
- Price variation rates for **revolvers** are 50–60 per cent.
- **Assault rifles** have the smallest variation in price rates in criminal markets of 40–60 per cent.

The lower price variation rate for assault rifles in criminal markets suggests that there are firearms for which there is a kind of consensus established over the prices that can be negotiated (revolvers also form part of this group). There may be explicit agreements between those negotiating prices to achieve such a low variation rate. The symbolic visibility of assault rifles is also key,

as will be explored in the analysis of qualitative data. Finally, there is less variety in the types of assault rifle that circulate in these areas. The extremely high variation in prices of pistols can be explained fundamentally by the wide variety available in this market.

Criminal market prices for firearms that are for exclusive use by the police or military, but that appeared as seized weapons in criminal activities, were studied to determine other factors, such as diversion or corruption, that could influence the prices and rates of variation of prices in the criminal market. As Table 2.4 shows, weapons used by the civil police—whose function is more investigative than repressive or confrontational—are most often found among seized weapons used by criminals (there are 18 coincidences among weapons from this force and seized by police, against nine and eight from the military police and the armed forces, respectively). This is not necessarily because the weapons are more likely to be stolen or diverted from members of this force, but because the civil police use a wide variety of weapons, including assault rifles made outside of Brazil, which are used exclusively by special forces within the civil police and are the most desirable to traffickers for their firepower, appearance, and sophistication.

In the case of firearms used by the military police, most overlap is found among Brazilian-made weapons, many of them with a great degree of firepower, such as the FAL 7.62 assault rifle, also very highly valued by traffickers, mainly for its firepower and durability. Taurus revolvers and IMBEL or Taurus pistols also feature in this category.

In sum:

- The most lethal firearms that appear in criminal markets are those used by the civil and military police and by the Brazilian armed forces, the majority of which are made outside of Brazil.
- Firearms used by security forces are the most expensive and most highly valued in the criminal market. They achieve the greatest rates of price variation in the criminal market.
- The percentages of firearms seized by police in criminal activities and used by police and military forces are: 39 per cent of assault rifles, 35 per cent of pistols, 22 per cent of sub-machine guns, and 4 per cent of revolvers.

Table 2.7 **Estimated number of firearms used in crimes in Rio de Janeiro city, 1993–2003**

| Estimated number of firearms used in crimes in Rio de Janeiro city | Percentage identified by consultants* |
|--|---------------------------------------|
| 159,723 (100%) | 150,139 (94%) |

* Consultants did not identify prices of *garruchas* or carbines, because they said that these types of firearms are not currently negotiated in *favelas* and they did not know about prices, or simply thought that these types of weapons were no longer used (the subjective component is important here).

Table 2.8 **Average value of the criminal firearms market in Rio de Janeiro city, 1993–2003**

| Type* | Number of firearms | Average price for this type of weapon (BRL) | Total price (BRL) |
|--|--------------------|---|--------------------|
| Revolvers (61%) | 91,585 | 383 | 35,077,055 |
| Pistols (27%) | 40,538 | 1,593 | 64,577,034 |
| Assault rifles (4%) | 6,006 | 8,559 | 51,405,354 |
| Machine guns and sub-machine guns (2%) | 3,002 | 2,386 | 7,162,772 |
| Total | | | 158,222,215 |

* Some weapons were not identified (see note to Table 2.7), which is why the percentages do not add up to 100 per cent.

Using the estimated average price data for types of weapons and the estimated number of non-criminal (768,898) and criminal firearms (159,723) in circulation in Rio de Janeiro city (see Table 2.1), it is possible to arrive at an estimate for the total value of the criminal firearms market. The figures used are all for the ten-year period ending in 2003.

The total value of the criminal firearms market in Rio de Janeiro city in the ten years from 1993 to 2003 is therefore BRL 158,222,215, or USD 88,392,299.²⁴

This is more than double the value of the total direct real cost of violence in Rio de Janeiro, which was USD 37.6 million in 1995.²⁵ It is worth pointing out that the majority of this violence is generated by the same product (firearms) that generates the huge sum of money calculated above.

Meanings of firearms: symbolic values

Military police and firearms: a relationship of love and respect

The macho culture of the police forces, associated with the warrior ethos and masculinity, is evident in the words of these police officers speaking about their guns:

I feel more of a man.

. . . you feel superior, like . . . Yeah, I am more of a man . . . Now I really am a man.

This is reinforced by a description of guns as being associated with feminine characteristics of companionship and faithfulness, attributions associated with docility and submission. Yet a gun is also a symbol of strength and power:

Woman, companion, even more faithful.

But some of the feelings that guns generate among the police officers are controversial or contradictory, depending on the situation and the phase of life of the police officer. Terms used to define these feelings include excitement, playfulness, curiosity, and fun when they first come into contact with guns, often as children; adventure and power when they use a gun in the army; and responsibility when they work with guns in the military police:

In the armed forces, I felt a false sensation of power. You think you are a hero, more of a man.

Armed forces, false security, self-esteem . . . but with time we learn . . . that a gun is not a toy. When I was 18 years old I had to grow up fast when I saw someone hit. Shooting at a target is one thing, but a person is another. You mature and see that a gun is really dangerous. You must be skilful and attentive.

Really you need a totally different view—in the army it's one thing . . . and when you go to the military police it's another. Although it is . . . practically the same guns, but you have a different kind of responsibility.

First contact

Police officers are generally familiar with firearms. Many are sons or relatives of other police officers. Others are from the *favelas* and may have had contact

with firearms there. For the vast majority—all the participants in this research, except two—their first contact with firearms was in the army before becoming police officers. People tend to enter the army younger than the police:

In my case I had contact from a very early age, from 12, 13 years old . . . because my dad is a police officer and my uncle is a police officer. I remember I would shoot at bottles, playing at my grandfather's.

I did not have much of a new sensation, because I was born in an area that was a bit complicated, there were a lot of gunshots and I would hear them often.

The enemy

The situations in which the police interviewed may use guns are heterogeneous. Members of the army address enemies and situations that for them are clear and defined: within a combat situation enemies should be exterminated. In practice, however, their use of guns is limited to training and they do not engage in real confrontations.

In the military police, however, the use of firearms occurs in real confrontations where the 'enemy' is not very clearly defined. The difference between the use of firearms in the army and in the military police hinges on two factors that are seen quite differently in the two institutions, the notion of the enemy and the definition of conflict:

Really, you have a totally different vision . . . in the army, it's one thing, you know, the guns there, you know, and then you go to the military police, and it's totally different. The weapons are mostly the same, but it's a different kind of responsibility you have. You are on the street and you don't know who the enemy is, so you are in a real bind . . . criminal elements can also hit innocents. So the responsibility is much greater.

The vagabundo is the end of the line for us, and we are for them—we are all about execution.

Traffickers are insignificant, they're puppets, they're illiterate, they don't even know how to count money.

. . . exterminate evil . . .

Box 2.1 Police violence in favelas

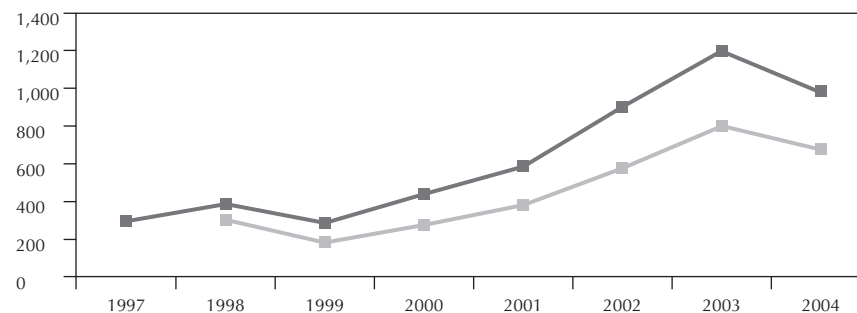
Between 1993 and 1996 police killed 16 per cent more civilians in *favelas* than in the rest of the city, though the *favela* population represented less than a sixth of the total population, according to Cano (1997). Cano also showed the lethality index (ratio of civilian deaths by police action to civilians wounded by police action) of operations inside *favelas* to be more than twice as high as in non-*favela* action, indicating 'a clear intent to kill' when carrying out actions in *favelas*.

Geo-referenced analysis for recent years has not been undertaken, but the overall trend in police violence is troubling: by 2003, civilian deaths from police action²⁶ in Rio de Janeiro had quadrupled since Cano's study, from rates that were *already* very high.²⁷

While 2004 showed marked improvement over the previous year's numbers, the rate of death by police action in Rio de Janeiro city was still about 11.2 per 100,000 residents,²⁸ by comparison, the *total* homicide rate in New York city in 2004 was around 7 per 100,000 residents.²⁹ While in theory this means that the average citizen of Rio is more likely to be killed by a policeman than a New Yorker is to be killed by anyone at all, in practice—if Cano's findings are an indication of current police practice—*favela* residents bear the brunt of police use of deadly force.

Source: Lessing (2005)

Figure 2.9 Civilians killed by police (justifiable killings—*autos de resistência*), Rio de Janeiro city and state, 1997–2004



Source: Rio civil police

Characterization of the conflict

The definition of the conflict as a 'war', 'guerrilla war', or 'urban combat' is common among police, and solidifies militaristic concepts in relation to the object of police action, to exterminate the enemy:

And in the police the war is real; the combat is real.

In the [military police] you hardly train at all to go into the middle of a war.

. . . because that's where the confrontation is. Now, you're in the middle of a confrontation, where the bullets are really flying, you know.

There is no other way, they only understand this type of language, there's none of that 'hey my brother' stuff. In the middle of a gunfight, there's no chit chat.

It is something unimaginable, something from a war—the reality is war.

What is a guerrilla technique? Sometimes it's easier to wound someone than to kill them, because then two police will have to carry him off. So for this reason [to draw police off], maybe the guy will shoot a woman.

I appreciate combat. I didn't want to be in the war, but I do have a spirit for combat.

Allusions to guerrilla techniques used by traffickers in confrontations with the police are frequent and are also referred to by interviewees from *favelas*. For the police, they supply one more justification for the indiscriminate use of repressive force through guns. Certain policies that reward police use of firearms against criminals have also encouraged this attitude:³⁰

Some police like to show off their on-duty killings [justifiable killings—autos de resistência].

Rules for using a firearm

There are rules, both formal and informal, regulating the use of firearms in the military police. Some rules serve to organize actions and to preserve the security of civilians and police, reflected in comments by interviewees referring to the need for technical training, self-control, and discernment. Others encourage improvisation in police action, lack of professionalism, and violence, as can be seen in remarks about a 'survival instinct' and 'learning by doing':

Police should only use weapons in legitimate defence.

You have to know something about taking care of the gun and how it works.

No one was raised to handle something that takes lives.

Either you kill or you die, or you wound or you are wounded.

Never go on patrol with your finger on the trigger, so that you don't have friendly fire.

Preferred firearms and firepower

Reaffirming the statistical data, the preferred weapons among police for use in *favelas* are those with greatest firepower (greatest number of shots per second; magazine with more ammunition); those that are good for shooting long distances; and those that are best able to puncture walls and bodies. For these reasons, the 7.62 calibre assault rifle is the favourite, and is used by the military police. The lightness of a weapon seems also to be important in certain situations, which is why the M16 is also a favourite. The Madsen 7.62 machine gun makes an intimidating sound.³¹ Among pistols, the PT40 and the .357 magnum are the favourites, while the .38 calibre is ridiculed as an 'anaemic calibre', because it is less powerful:

A 7.62 assault rifles will finish off a bandido [criminal] right away.

A 7.62 is going to hit or immobilize the guy, for sure. The M16 is a lighter weapon; you're going to shoot someone and they won't always go down, it will give the vaga a chance to react . . . Now they use grenades. If you shoot someone with an M16 and he is still able to think, he'll throw a grenade, and then everyone will die. A 7.62 doesn't give him that chance, get it?

Each weapon has a function. It's not that you prefer one or the other. Assault rifles are for confrontations at a distance. Pistols, for confrontations at a closer range. Sub-machine guns to sweep up or take a house by storm, because it allows you to be mobile. The gun I like best is the G3 or AK-47, if I could use it. Since I can't, it's the 7.62 or .223.

I think that for individual use my colleagues prefer pistols, but for collective actions I would say the favourite is the 7.62 or the Madsen. The ideal weapon is the Colt assault rifle.

The appropriate gun for police use is one that does not allow for . . . a counter-reaction by criminal elements.

The M16 is the best gun there is.

The problem with the M16 is that it only has two magazines, which could be fatal in a long-distance shootout. M16 is for light assault. AR15 is less popular in favelas now; the traffickers call them 'cutie-pie' and 'little melissa'.

A .30, for example, makes an intimidating noise.

A police officer may be a jack of all trades, but they have to use a gun that fits with the reality they live in.

Weapons used when off-duty include: PT40 and .357 calibre, because they have good stopping power.

There is an offensive disadvantage and technical problems, like with .40 pistols . . . problems with the cracks in the barrel, which often does not withstand the sequence of shots and may blow up.

The desired firepower is based on the 'enemy's' firepower; police express a desire to have firepower 'equal to the traffickers'. Weapons seen in the hands of traffickers include the 9 mm, .45, Desert Eagle, AR15, AK-47, 3.57 pistol, M16, and Colt:

Traffickers make fun of police because of the guns we have.

Our firepower has to be equal or greater [than the traffickers]. Police must have weapons that are made to put someone down.

We have to find ways to take guns out of the hands of criminals.

Corruption

Although it was put to the group indirectly, researchers made clear that they wanted to know about police corruption, especially diversion or trafficking of firearms. At first, the answers were defensive, evasive, and abstract, blaming higher-level police for the corruption that seems to occur on a large scale:

How would I know the price?

First, police do not have a way to take guns into favelas. Guns come into favelas because politicians bring them there. What politicians want from favelas is a vote.

It's political, it's political. They want a vote, so they bring drugs.

People who have power aren't going to be searched by anyone.

Airplanes for the air force, you know, bring contraband.

Judges travel a lot—it's been proven that judges bring the stuff. Senators, too, there have even been cases of senators who have lost their job because they were involved in drug trafficking. Now, they are even bringing stuff in postal service trucks.

As the dialogue advanced, the responsibility for corruption became less abstract. Police directed criticism towards the higher ranking officers:

Today the police force is political. I have received orders not to go into a certain favela: look, don't go up, just let them do their thing.

It is so dirty: illegal transport, gambling—no one does anything; these are orders from our commanders.

Contradictions and justifications also implicated lower-ranking police as the conversation progressed. The 'I don't want to know' and 'just let it go' attitude is evidence of this. But this is also a defence strategy in a highly organized hierarchy:

I don't understand what the official is asking me to do, because I'm ignorant.

When police find an arsenal of weapons and ammunition, they take them for themselves, since the military police don't provide us with what we need. It's a question of survival.

It's not robbery, it's for our own survival.

Firearms in the *favela*: seduction and destruction

This section is based on wide-ranging interviews repeated over time with three men aged between 24 and 34 years old ('consultants', designated C1, C2, and C3 below), who were born and raised in the *favela* (two of them lived and worked in the *favela*) and had direct interaction with traffickers. One claimed

to have been a 'soldier' of the drug trade, but had stopped engaging in criminal activities four years previously. The consultants had dealt with firearms, whether in drug-trafficking activities or because they had family members or friends who were involved. For one, proximity to firearms came through his experience in the army, where he worked with uniforms, ammunition, and weapons in the barracks. Another, in addition to contact with firearms in the place where he lived, had contact with firearms because he worked in a security firm and took care of the equipment and the administration of licences. In all three cases, knowledge of firearms was extensive.

First contact with firearms

The availability of firearms and the natural curiosity of children ensure contact with guns from an early age. All three were born and raised in *favelas* and described contact with weapons as children:

C1: ... there's no way not to have contact in the favela; every kid does . . . today it is normal, today you even see kids with guns in their hand, not only in my favela, but in any favela.

My cousin too, he was a vagabundo at that time, he used guns . . . I got to know about them through him, but I was curious about them when I was a child.

Ah, I don't know, I always liked guns, to look at them, but I never really wanted one, you know, before I was about 18 years old. Then I wanted to join the army so I could use guns.

C2: . . . when I was about six or seven I saw the guys with guns; at the beginning I was afraid, but then I got used to it, because it was so common to see that there. . . . my friends, you know, were traffickers, but I always thought it was wrong.

Since I was little, when I started to see that everyone had a gun: my uncle, my stepfather, who was in the marines . . . Then as I grew, I started seeing my friends, too, getting involved with guns.

C3: From a really young age we . . . see them in the streets, bandidos with guns . . . but to touch a gun . . . is another thing. I touched guns when I was a child, but never to impose or use it for defence.

I had a friend who was stealing stuff, he had a gun, so you know that curiosity to know who it is, you're in your friend's house, he comes and shows us, shoots it off, we watched.

Question (Q): What kind of gun?

C3: A .38, a light weapon, .38, .32.

Because traffickers tend to flaunt weapons openly, the use of firearms is seen as something commonplace in *favelas*. This seems to produce acceptance, curiosity, and interest in those who have not yet used a gun. The role of the family here is fundamental. Generally, the mother is responsible for the home and often tries to ensure that, insofar as is possible (because often she works outside the home and cannot take care of her children), the children do not get involved with firearms or in criminal activities. The final decision is an individual one, however:

C1: . . . my dad and mom always told me not to, just like everyone's mom and dad, except that there are some who don't do as they are told.

Ah, everyone makes up their own mind, you know; we all make up our own minds.

Sensations

The sensations that come with using firearms for youth in the *favela* can be quite diverse. Guns generate fear, since carrying a gun illegally increases one's chances of being killed, especially by the police. But, paradoxically, guns also represent a certain form of security, depending on what the interviewees called 'context'. They define this context as 'war' or 'warfare', in which it is necessary to use a gun to 'kill or be killed'. Here, the interviewee who had been a 'soldier' reveals contradictory feelings:

C3: Ah, a different sensation, a sensation of adrenaline, a sensation that you know you have a gun, that you are there to kill or die and that's it. When you don't have a gun you feel more relaxed than when you have a gun. Because if you come across the police and you are armed they will shoot at you, they'll kill you, they'll want you to surrender, because they know that if you have a gun, you might try to kill them. Now, if this same police officer finds you unarmed, he might arrest you

without a hassle, he'll see that you aren't armed and you don't represent danger for him, so it's a different situation.

When I was involved, I thought it was great: 'I have a gun I am powerful!' . . . I had a pistol, a .38. With a .38 I didn't feel much, but then later, when I started to use the pistol, I changed my mind.

Assault rifles are to exchange fire—assault rifles are for guerrilla war! That's the reason so many have assault rifles—they are practically guerrillas!

There is a status that comes with using firearms in the view of the interviewees, but that status, for the *bandido*, also depends on the supposed 'respect' of the community. Respect for traffickers is not automatic: only those who do some kind of job or provide some kind of service for the community, such as organizing a dance party (*baile funk*), are respected. The consultants said that 'people in the community don't like *vagabundos*' and do not want to get involved in trafficking. The relationship of the community with traffickers is more complex than it may seem at first glance.

Weapons preferred and seen in the favelas

The firearms favoured by youth in the *favelas* are those linked to trafficking and with high levels of firepower. When asked about the guns he used when he worked as trafficker's 'soldier', one interviewee responded as follows:

C3: Ah, 9 mm, .38, those two calibres, after that I used an assault rifle . . . 7.62 Ruger, Ruger .223 and 7.62 [the assault rifle used by the Brazilian armed forces].

Q: Which was your favourite weapon?

C3: 7.62 . . . because it is the most precise assault rifle in the world. 7.62 can puncture even bullet-proof walls; depending on the depth . . . of the wall it will go through, but another assault rifle wouldn't . . . Although it has less ammunition, the precision of the shot is greater than the ammunition for the Para-FAL, which is a 7.62.

We would often see police with bullet-proof vests, for this reason. 7.62, depending on the distance, if you were shooting at point-blank range would puncture that. A bullet-proof vest would protect someone from a pistol, maybe, a .38.

A second interviewee spoke of criteria such as durability:

C1: . . . firepower is one of the criteria, and also durability: there are some assault rifles that are weak, others are stronger.

Stronger ones are G3, HK G3. By stronger I mean durability, the AK, of course, also FAL is not weak, but without the plastic butt that it has behind here. The G33 too, but with the retractable butt that folds up. It's made of iron, because there are some that have nylon handles and they break.

Q: What are the favourite types of guns in the favelas today?

C1: AK and G3, 7.62, also FAL.

Firearms most used and negotiated in crimes

Generally, the first weapons the consultants had contact with were .38 calibre revolvers, mainly the Taurus .38 revolver, known as *oitão* ('big eight'). This reflects the age of the interviewees who can speak about the period beginning in the early 1990s, when this type of weapon was the most commonly used in the *favelas*. The IMBEL pistol is also recognized as one of the first guns to be used and circulated commonly. Both are used by the military police and the armed forces:

C1: My cousin always had an IMBEL pistol . . . Suddenly, when he died, I don't know, I started to like them more.

C2: . . . the firepower kept increasing. But it was .38s, you know, shotguns. It's impressive to see this evolution to even war-grade stuff that they have; all of a sudden everybody had assault rifles.

Variations in firearms most frequently seen over time

There is a clear perception of change in the type of armament between the beginning and the end of the 1990s towards more lethal armament with higher firepower. The interviewees said the most commonly seen weapons in *favelas* are: FAL and Para-FAL 7.62, AK-47, HK, HK G3, AR15, and M16 assault rifles; IMBEL and Taurus pistols; and .38s. The latter are now said to have an 'anaemic calibre':

Q: Do you see a change in the guns from the '90s on? What kind of change?

C1: Yes, in the beginning of the '90s, at the beginning, like '93, the AR15 started arriving.

Q: Before that, what was there?

C1: There were machine guns, .38s.

Q: What type?

C1: Let me think . . . Uzi, there were those Uzis, they had INA, Beretta, Taurus also, that imitation, Taurus PT12, and Pazan No, AR15s were only in the '90s.

C2: The armament was much heavier. For example, the .38 was no longer used, not because of power, but because of shot capacity. Six shots is too few, for a revolver, you know, there are higher calibre revolvers that are not used, because they only have a few shots . . . with the pistol you have a magazine and with one you can shoot 30 times . . . the assault rifle, which is a weapon with a lot of firepower, has a high shot capacity.

C3: To drop a bandido from the other faction, the first contact was like that, lighter guns, an oitão, the famous oitão and from there it got worse; it got bigger and bigger.

'Fads' can affect preferences for firearms. The consultants said that flows of particular weapons to *favelas* in certain periods might be related to contraband weapons or those that are used—and presumably illegally negotiated—by law enforcement agents:

C1: I don't know why these fads exist. I don't know if it is opportunity that comes from outside, you know. I don't know if it is because they are cheaper. I know that at certain moments there are weapons that are more 'in style'. Like what I said about Rugers: there aren't any more of those today; there are only very few, but not like there were in '95 or '96.

SIG was used a lot, but now they don't anymore. Now it is more G3 and the G33, you know, the G3 HK, or also the G33 HK. Except that 5.56, 7.62 FAL, AR15 is still used often.

Enemy firepower

Researchers asked why heavier armaments and increased firepower are being sought by traffickers. Consultants' responses suggest that conflict in Rio and the corresponding lethality will continue to escalate as long as each side carries on arming itself in relation to the other:

C1: It always has to be more than the police . . . because you, when you go up [to a favela] you are there to defend what is yours, from the police, and sometimes from other rival factions too, and you know what [weapons] the others have.

If one side gets heavier, then the other side is going to get heavier too, so if the police got some [new weapons] I'm not going to keep using a .38.

Even the police until just a while ago were saying . . . 'Police only have .38s and the vagabundos have assault rifles!' For a long time police have stopped using .38s. They can use them, you know, they can use rotten weapons.

. . . it's the gun that the police battalion gives them, OK, but there are no police that don't have an assault rifle and a pistol?

The enemy

There are two types of enemy. One is the factions that occupy an area and continually dispute territory to control the drugs trade, with whom confrontations are direct, armed, and frequent. The other is the police, who can be bribed or held at bay by adopting a defensive attitude when they enter to occupy a *favela* or to arrest someone involved in trafficking. This happens only as a way to protect the continuity of drug sales in the occupied area and not out of a sense of obedience to the law or respect for the power of the state:

C3: Another faction . . . could invade the community where I am trafficking and shoot me dead . . . even if you have a gun on you, you can still die, but at least I could shoot him too . . . I'm not going to let him shoot me alone. So I got a gun so I could at least shoot back, at other factions and at the police, too.

But we shoot at the police to make them run, not to kill them, we know it is a huge problem. Police are part of the justice system, and the justice system is part of the government. With traffickers it's different.

Shoot at them so they can't come in, but after they are inside the favela everyone should hide . . . killing police is a problem.

Q: So is the question of firearms in favelas more for other factions than for the police?

C1: For the police, too, but it is more for other factions . . . They stay there until it gets dark because police don't stay in favelas when it's dark. Then sometimes the police are coming up, there are half-dozen shots fired, and everyone goes home. I don't know what criteria they use.

Corruption

All three interviewees spoke of police corruption without being prompted. They perceived the police institution as discredited and suggested it was difficult to identify the criminal when the law enforcement institutions are corrupt. For people who live in this situation, it is often easier to deal with criminals than with the police, because you never know if they are corrupt:

C1: In police confrontations . . . the tactic is more to hide, because the theory is, 'you don't kill police, you buy them'; we've always said this. If you kill the police, the favela is always going to be full of cops. If there are constantly cops, customers won't come; it's a lose-lose situation, you see?

C3: It can be favourable, yes, like for a faction that is occupying another favela. So they might close a deal with police: the police leave a community, and the other faction comes in after them to take it.

Interviewees see corruption as a more generalized phenomenon that transcends the police and reaches other government institutions; for them, it is abstract, powerful, untouchable, and always directly associated with the state:

C3: So, the stuff comes through contraband; it comes through the docks and leaves. Everyone knows about it. They don't fight it because they don't want to, because they make money off it.

Q: Who?

C3: The justice system, the powerful people . . . It has to do with power, the power way up there at the top. Stuff comes over the borders, through the ports, you know, through the airports, and keeps on coming . . .

Q: Through the airports? How? There is so much security.

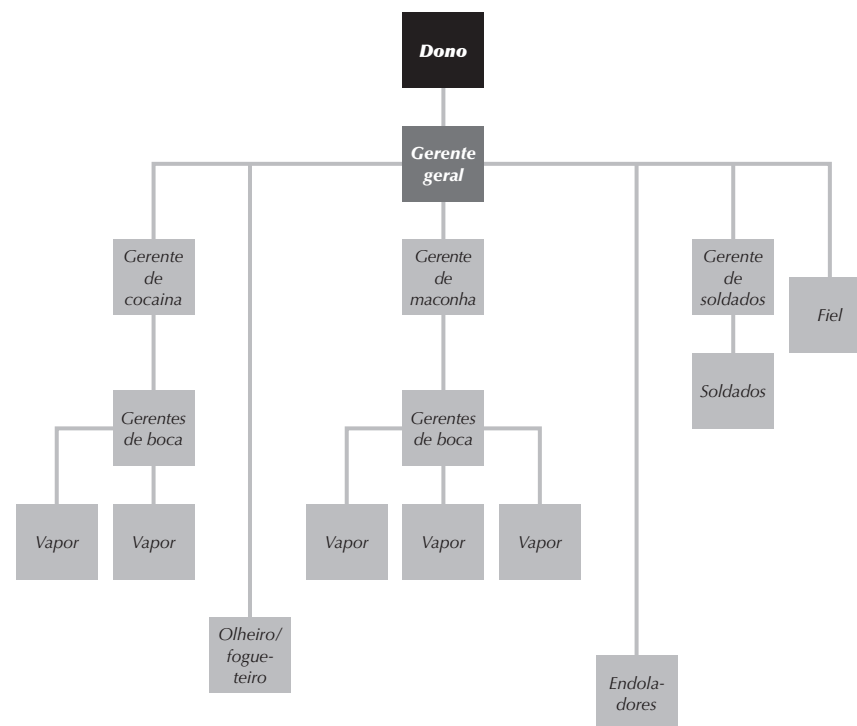
C3: Everything is bought; everything is money; if it wasn't for money, none of this would be happening.

Guns and hierarchy within drug gangs

Drug-trafficking organizations tend to follow a hierarchical structure, as described in Figure 2.10.

In the past, there seemed to have been a relationship between the type of gun used and the hierarchy within the criminal organization, but with increased

Figure 2.10 Firearms and hierarchy in drug-trafficking organizations



Dono = boss; gerente geral = general manager; gerente = manager; cocaína = cocaine; maconha = marijuana; soldado = soldier; vapor = seller; boca = operation/faction; fiel = personal bodyguard; olheiro = lookout; fogueiteiro = fireworker; endoladores = drugs packager

Source: Dowdney (2003)

circulation of firearms, this relationship is changing. The following statements explain what links continue to exist today:

C1: The guys who have the heaviest weapons are the highest in the hierarchy of traffickers.

C2: No, you can't have every type of weapon . . . it's the boss who will determine this. If he wants to give me an AK, he gives me an AK. If he wants to give me a 7.62, he gives me a 7.62, an AR15, whatever he wants.

In general, the relationship between the type of firearm and the hierarchy of trafficking, according to the interviewees, is structured as follows, although it is becoming less so over time:

- Assault rifles are used by *gerentes* (managers) and *donos* (bosses), and when there is a confrontation by *soldados* (soldiers). Prices vary between BRL 4,000 (USD 2,235) and BRL 13,000 (USD 7,264). Assault rifles used include AK-47 (BRL 7,000–12,000 or USD 3,911–6,705), AR15 (BRL 8,000–10,000 or USD 4,470–5,588), FAL (BRL 8,000–10,000 or USD 4,470–5,588), sub-machine guns: INA-IMBEL, Taurus-Beretta, or Uzi (BRL 4,000–7,000 or USD 2,235–3,912), and FN or FN mini machine guns or INA machine guns (BRL 9,000–15,000 or USD 5,029–8,382).
- *Olheiros* (lookouts) and soldiers use IMBEL pistols and Beretta 9 mm (price BRL 500–1,000 or USD 279–559) and Taurus .38 revolvers (BRL 150–700 or USD 84–391).

Violence

Violence has become such a banal, everyday experience that sociologists who analyse *favelas* have coined the term 'violent sociability' or 'naturalization of violence' to describe it (Da Silva and Antonio, 2004). People in *favelas* grow up and live with different types of violence. They belong to generations in which drug traffickers control territories and armed disputes between factions or the police are constant. Life and death are transformed, in this way, into something ephemeral:

C3: Exchange of gunfire, vagabunda police, police killing criminals, bandidos killing police, criminals killing other criminals, all kinds of violence.

. . . because in the favelas, as I said, we only see this violence. When we are young, our references are criminals. We look in the mirror and we see an armed criminal looking back at us.

C2: . . . all this atmosphere of violence came crashing down on me. My uncle was involved here, and he was killed by a trafficker, because he started using drugs.

The conflict

The conflict is generally defined as 'war' or guerrilla warfare, although the interviewees know how the term 'war' is commonly used:

Q: Do you think you have a war in the favela?

C3: The war that we have is to do with the factions: faction against faction.

Q: For you, is it the same thing as a war?

C3: No, it's not the same as a war that we see, you know, like for example . . .

Q: Iraq?

C3: No . . . those wars are totally different. War of factions is for the power of drug trafficking . . . We are in something like a war. You know how it is in Maré, a war between the different factions there . . . it's a war of traffickers with traffickers.

Conclusion

The empirical findings of this study make sobering reading. There are 4.3 firearms for every 10 men aged between 15 and 65 years in Rio de Janeiro city, and more than 17 per cent of guns that circulate in the city are used to commit crimes. Firearms are widely available in the city—in the city's *favelas* in particular it is difficult to avoid encountering guns. There is a one in six chance that these weapons will be used to commit criminal acts.

The situation worsened over the period of study (1951–2003), when the volume of illegal firearms seized by police increased, as did the volume of weapons diverted from the legal to the illegal market. Legislation has, however, had an impact on the diversion of weapons to the illegal market: the number of guns diverted from legal to illegal markets declined considerably between 1997

and 1998, coinciding with changes in Brazilian firearms control legislation. The most pronounced growth occurred in the third period of study, particularly in 2002, followed by a dramatic decline in 2003.

A worrying trend is the increase in lethality of weapons in the criminal market. The data shows increases for pistols (the majority Brazilian-made); assault rifles and sub-machine guns (the most lethal firearms, mainly from the United States); and also home-made guns. In general terms, the most expensive firearms are also the most lethal, and their circulation in criminal markets increased in the decade to 2003. Factors such as abuse of force by the police, corruption, the occupation of areas by one drug faction or another, or control by the police influence prices in the criminal market.

Both police and youth from *favelas* define the situation in the *favelas* as a 'conflict'. This helps to prolong armed confrontations and make them increasingly lethal, involving more expensive firearms with greater firepower, and producing more deaths. Both groups see the use of force by police as being directly proportional to the use of force against the police. Given the association of firearms with lethal events, such as 'armed confrontations', and the fact that for the military police the 'enemy' is sometimes difficult to identify, professional training for the security forces is crucial. This fact is recognized by the agents themselves. There is a need for a responsible attitude towards firearms use among military police. This responsibility is associated with the moderate use of force (a discretionary act; legal; legitimate; and, ideally, professional), and is different from the use of violence (an arbitrary impulse, illegal, illegitimate, and amateur) (Muniz et al., 1999).

For youth from the *favela*, access to firearms, as a way to enter into criminal activities, is a short-term path to quick ascension, and to obtaining consumer goods, prestige, power, money, women, and respect. Related to the image of the guerrilla warrior, virility, and courage, firearms are a fundamental element in the construction of masculinity, for both police and youth in *favelas*. Perhaps in the majority of cases, violence is no more than a sporadic and brief show of force. For some people from the *favelas* it represents a way of leaving their mark—the predatory mark of a violent death—within their social network.³² This supports the view that policies to tackle the proliferation of increasingly lethal small arms in Rio need to address the lack of educational and work opportunities for young people in *favelas*. 📌

Methodological annex I: databases, organization, and analysis

The study began with an analysis of information on weapons seized in criminal situations (from 1951 to 2003) and licensed (from 1930 to 2001) in Rio de Janeiro state, held by the DFAE. The following categories of firearms are missing from the DFAE database and could not be included in our estimate:

- small arms from outside of Rio that were registered in their respective state of origin and whose details were not forwarded to the National Arms System (SINARM), which DFAE analyses. Details should be included in the federal system, but are not always;
- weapons that are not licensed, such as those used by individuals who belong to the military police and fire department (the licenses are held by the military police battalions and the fire department, not the individual), and whose details therefore do not reach DFAE; and
- small arms that were seized in criminal situations and then returned to their owners or sent to the ballistics laboratory (Instituto de Criminalística Carlos Éboli) after seizure. The study encompassed weapons used by police in criminal occurrences and the firearms involved in the crimes.

Since the study focuses on firearms seized in criminal activities in Rio de Janeiro city, it was necessary to separate the weapons that were from the city from those that were used in crimes in other parts of Rio state. This was done using an existing variable in the database identifying the body through which the seized weapon had been included in the system: the civil police department, the military police battalion, or a specialized police department. While we could assume that weapons seized by the civil police departments or military police battalions in Rio city came from crimes committed in the city, it was not possible to determine the origin of weapons coming through the specialized departments, since they are not confined to the city. The following steps were taken to arrive at the number of firearms seized within the city limits:

- Using the variable 'point of entry', we separated weapons seized by the specialized police departments from those seized by the civil police and

the military police in Rio state. We found that 38 per cent of firearms were seized by civil police and military police departments in Rio city, 18 per cent by specialized departments, and 44 per cent by military police battalions and civil police departments in the rest of the state.

- We separated the firearms seized by civil and military police battalions in the interior of the state and in the city.
- We calculated the percentage of weapons seized by the civil and military police in the city compared to the total of firearms seized by the civil police and the military police.
- We projected this percentage onto firearms seized by the specialized police departments, constructing a representative sample of the profile of firearms seized by these departments. This allowed us to estimate the number of firearms seized by the specialized departments that belonged to the city of Rio and incorporate them into the database of firearms from the city civil police and military police battalions. This gave us a complete database of firearms seized by police in criminal activities in the city of Rio de Janeiro.
- We calculated the percentage of these firearms held in Rio city against the total for the state. Since the sample of firearms from specialized police departments remained stable, this percentage remained equal to the percentage of firearms seized through civil police and military police battalions in the city out of the total of seized firearms (46.2 per cent).
- To determine the total number of firearms in circulation in the city of Rio de Janeiro, we projected the percentage of firearms seized in the city onto the total weapons seized in the state (calculated at 2,010,003 firearms belonging to civilians, professionals, and the state).³³ The 101,859 firearms that were destroyed were subtracted from this total. Thus, 46.2 per cent of this total (928,621 firearms) was the estimated number of firearms circulating in the city of Rio de Janeiro.
- To arrive at the number of firearms involved in criminal activities that circulate in the city, we applied the same methodology used in a previous study (Dreyfus and De Sousa Nascimento, 2005) to the total estimated number of firearms in circulation. Dreyfus and De Sousa Nascimento used the results of voluntary surveys of participants in small arms buyback campaigns in Rio de Janeiro and São Paulo to estimate the percentage of informal hold-

ings (unregistered small arms held by private individuals and entities, which are not necessarily used in crimes) from among all the firearms in the hands of non-criminal civilian individuals. The percentage of informal firearms and the percentage of registered firearms were then subtracted from the sample of all arms in circulation (based on the cleaned up and appropriately weighted databases of seized and registered arms) to arrive at the percentage of criminal holdings. Using this methodology, the percentage of criminal firearms in circulation in the city of Rio de Janeiro in the period 1993–2003 over the total estimated number of firearms in circulation is 17.2 per cent, or 159,723 crime guns in circulation in the city of Rio de Janeiro.

These estimates allow us to construct two rates:

- 1) the number of firearms in circulation in the city of Rio de Janeiro per male resident; and
- 2) the number of crime guns in circulation in the city of Rio de Janeiro per male resident. We used population rates of men between 15 and 65 years of age.

Methodological annex II: focus groups and interviews

Focus groups

The author and the police capacity-building team at Viva Rio conducted three focus groups with police officers. Group interviews enabled researchers to assess not only the language used by the police, but non-verbal signs, such as gestures, silences, parallel discussion, movements within the group, and positions of the participants within the space. A group environment was thought to help counter mistrust when discussing sensitive subjects such as police corruption and police violence, although some information coming from individual perceptions may have been lost through this method.

- *Focus group 1* was used to test and refine our questions about firearms. A collective interview was carried out with four sergeants who trained rank-and-file police as part of Viva Rio's police capacity-building project.
- *Focus group 2* was recruited informally with the help of the four sergeants involved in the first group. Group two consisted of rank-and-file members of the force who were asked to attend a 'meeting to discuss firearms' and given a day off to attend. There were 11 participants from the military police: 10 corporals and 1 sergeant. The majority were between 30 and 37 years old and all had 8 years of experience in the police, except the sergeant, who had 20 years of experience. All worked in military police battalions with experience in using firearms based near or in *favelas* where the conflict between police and traffickers was very intense.
- To establish *focus group 3*, we asked the general commander of the military police of Rio de Janeiro to allow the participation of two or three military police officers working in *favelas* from each of the ten battalions that had seized the greatest numbers of arms in the city since 1993. The group eventually comprised 13 of the 15 military police officers initially invited by the general commander. Those who did not appear had changed units or were replaced by someone else. All had at least three years and a maximum of 25 years of experience with the military police. All had been on patrol in *favelas*, some recently, though at the time of the interview they were all involved mainly in administrative functions. As requested, the general commander

ensured that participants from battalions located in areas of armed conflicts between traffickers and police were involved.

Interviews with firearms 'specialists' in favelas

Periodic meetings were held over two years with two young people from *favelas* who had practical experience of handling small arms. Both had extensive knowledge of firearms and maintained direct contact with people involved in trafficking, although neither of them had been involved in trafficking themselves. One had been in the army and had been responsible for controlling small arms in the barracks for five years. The other had worked in a private security company, where he too was in charge of equipment, including guns and ammunition. Currently, both are dedicated to 'doing what they like', which they define as the most important thing in life.

Formally, we worked on prices for four weeks with each one. Informally, we worked with each for a year. The first two meetings were aimed at evaluating their knowledge of firearms, for example by asking them to identify from photographs the type, calibre, and country of origin of weapons. In the third meeting, we showed them a list of firearms described by calibre, type, and brand, and sat together to fill out the prices they believed would be negotiated for the weapons in the criminal market. They were able to look at photos that visually identified the firearms.

After we had worked with each consultant for approximately three months, we asked them, separately, to check information the other had given on prices of firearms in the illegal market. This exercise helped to correct some of the initial errors, though their responses were very similar.

A third consultant—an ex-trafficker who had left a criminal gang four years previously and had joined a social project—was interviewed for one week to verify the information we had on prices and the symbolism of the firearms. The permanent and informal contact established with all the consultants allowed us to correct any mistakes and revisit information about the kinds of weapons most frequently seen in *favelas* in Rio.

During the various meetings, the consultants told stories about guns—first other people's and then more personal ones. None of this was taped or written, because when we tried to tape a session, it caused inhibition and even rejec-

tion. After analysing the data and conducting focal groups with the police, we conducted an interview on the life history of each consultant, in order to enrich and deepen the study of symbolic factors related to firearms and the conditions that bring people into contact with them. We also inquired about conflicts in the places they live, how they position themselves, and their opinions in relation to the use of firearms in these conflicts.

Methodological annex III: prices, volume, and symbols

The average of the prices given by the consultants was calculated. When there were extreme differences, a third opinion was always consulted before calculating the average. These results were then compared with the data from the police focus groups, and the average prices of the firearms were calculated, organized by calibre, type, and brand.

Research on the prices of these same weapons in the legal international market was conducted through consultation of more than 50 Web sites.³⁴ Prices in the legal Brazilian market were taken from Dreyfus, Lessing, and Purcena (2005). Average prices and the rates of variation of prices in the criminal market were then calculated and compared.

A final average price for each type of firearm was calculated, and was then projected on the percentages of firearms for each type. The latter were calculated based on the estimation of firearms in circulation in Rio de Janeiro city.

This gave a price for each type of weapon in circulation, as well as the value of all the weapons in circulation in Rio city. Finally, we calculated the value of the estimated 17 per cent of weapons in circulation in the criminal firearms market, this time calculated as a proportion of the firearms in circulation in the city of Rio.

Information about the police and armed forces units that used the same types of weapons that appeared in criminal markets was added in order to detect diversion of firearms from the security forces as a factor that could interfere with prices or price variation in the criminal market.

Prices were then compared with information on the meaning and values assigned to firearms by police and consultants from *favela* communities to see if symbolic meanings influenced prices in criminal markets. Photos of firearms were also viewed and discussed.

Methodological problems

Prices

- Average prices are sensitive to extremes. We elected to show both the average prices and the rate of variation that these prices are subject to.

- Information was lacking for prices of many firearms in this study. For these we used the average prices of firearms of similar type, brand, and calibre. This projection runs the risk of generalizing prices of firearms where information is lacking, affecting the results.

Estimates

- Estimated average prices by type and calibre were calculated using only the prices of guns for which we had information, which may also have affected the final result.

Types of firearms in circulation

- A bias was introduced based on the firearms that the interviewees recognized.
- The calculation of firearms in circulation in criminal activities by type of firearm comes from a projection of the firearms by type among weapons that were seized in criminal activities, and not from the estimates given by the focus groups or consultants from the *favelas*. In *favelas* where there are conflicts among factions and between factions and the police, the proportion of firearms by type might be different. For example, the informants thought that the ratio of assault rifles to revolvers in *favelas* was much higher than our calculations suggest.

Symbolism

- The symbolism attributed to the firearms could be affected by individual perceptions of the agents interviewed: they represent the views of military police involved in the conflict and young people with no link to drug trafficking at the time of their interviews. In this latter case, recent changes in the symbolism among youth involved in trafficking and youth in the *favelas* might not be reflected.

Chapter 3 Demand for Firearms in Brazil's Urban Periphery: A Comparative Study

Benjamin Lessing

Executive summary

Underlying much of the debate over gun control in Brazil, particularly the Disarmament Statute and referendum, has been a subtext of good, hard-working citizens under siege from a virtual sea of well-armed criminals left to their own devices by a corrupt and inefficient police force. The imagined locus of this much-feared armed criminality is virtually always the peripheral areas that have grown so rapidly in and around Brazil's cities since the dawn of the industrial age. This is particularly true of Rio's *favelas*, which have become the principal battleground in a militarized drug war between police and well-armed criminal syndicates. However, fear and a lack of comprehensive empirical evidence can lead to inaccurate perceptions and beliefs about these areas; worse, a misunderstanding of the dynamics of organized crime and the illicit arms market can lead public officials to adopt policies that aggravate, rather than mitigate, the accumulation of illegal weapons and the armed violence that inevitably results.

One barrier to uncovering the causal mechanisms behind firearms demand and armed violence in the context of Rio's *favelas* has been their anomalous nature. Many researchers have assumed that the situation is so different from other cities—where nothing like the organized drug syndicates of Rio exists—as to be incomparable. This study takes the opposite view: we can only understand which features of the situation in Rio are contingent and which are crucial by comparing the strong territorial dominion of Rio's drug gangs to weaker forms of local criminal organization in other urban settings. For this study, after completing an initial phase of research on demand in Rio's *favelas*, I conducted field visits to nine peripheral communities in Porto Alegre, São

Paulo, and Recife. I spoke with residents and current and former drug dealers and other criminals, as well as local police officers and government officials.

The results are analysed here in terms of three different segments of the peripheral area population: law-abiding citizens, or *trabalhadores* (workers); at-risk youth, i.e. those considering entering some criminal organization (or becoming an autonomous property criminal); and the criminal organizations themselves. I find that for each group, the degree of organization of the local drug trade is a crucial determinant of the dynamics of firearms demand. A brief summary of my empirical findings follows.

Demand for firearms among law-abiding citizens

- Demand for firearms by law-abiding residents of peripheral areas is, in general, lower than in the middle-class population. Residents face additional costs to gun ownership, and in some cases may face reduced incentives.
- In all peripheral areas visited, residents indicated that a serious cost to gun ownership was involvement, or the perception of involvement, on the part of neighbours and/or police with criminal elements. The distinction between law-abiding citizen (*trabalhador*) and criminal is stark, and guarding it can be a matter of life or death to residents.
- Domination of a peripheral neighbourhood by a single organized armed group further reduces demand for firearms on the part of law-abiding citizens. There are two principal channels of this effect:
 - * Such groups usually impose a form of 'law and order' that reduces property crime and aggression among residents. While such groups may themselves practice armed violence, they are too powerful to make personal gun ownership a viable defence strategy.
 - * Armed criminal groups that establish local dominance often practise a form of community gun control. At a minimum, these groups will want to know who has a firearm and why. In some cases, they may confiscate a weapon or forcibly enlist its owner into their coteries.
- In situations where local criminal groups are numerous, small, and engaged in infighting (as observed outside Rio), these effects are weaker, and demand

for firearms by law-abiding citizens—hoping to protect their homes and families—is likely to be higher.

- Overall, demand for firearms by law-abiding citizens varies inversely with the degree of concentration and local dominion of armed groups.

Demand for firearms by youth entering criminal organizations

- For many peripheral youth, gun ownership implies, and is a major benefit of, membership in armed criminal organizations. Gun ownership is a physical token of the power, wealth, and status that membership is thought to bestow.
- Where armed groups are highly organized and enjoy a long-term local monopoly on armed force, firearm ownership may become associated almost exclusively with membership in such groups.
- This type of demand is likely to vary in direct proportion to the power and status of local armed criminal groups. When these groups are profitable, able to pay their soldiers a high salary, or perceived in the community as powerful and successful, more youth will seek membership, driving up effective demand.

Demand for firearms by criminal organizations

- For criminals and criminal organizations, firearms are essential inputs for illicit economic activity. They are a form of capital, one of a handful of key resources that groups seek to accumulate and employ in further expansion.
- In smaller organizations, individual members provide their own weapons. Larger organizations maintain arsenals and provide 'on duty' weapons to new recruits.
- The acquisition of automatic weapons and other military-grade equipment marks a change in strategy by criminal groups, away from maintaining anonymity towards ostensive armed presence. As such, it is generally only advantageous to the larger, better organized criminal groups.

Introduction and sources

From the very outset of the campaign in favour of the Disarmament Statute (see Chapter 1 of this volume), one of the most common arguments against

disarmament and more stringent controls on registered weapons has been that they would 'disarm the good citizens and leave the bandits armed'. As discussed in the other studies in this Special Report, restrictions on legal firearms affect, above all, middle-class gun owners, and to a degree that is unpleasant to recognize, the good citizen–bandit distinction reflects deeper class cleavages in Brazilian society. Unfortunately, Brazil remains a country deeply divided by socioeconomic status, with one of the most unequal distributions of income in the world. This inequality is on open display in most Brazilian cities in the form of stark distinctions between informally urbanized peripheral areas (sometimes, but not always, characterized as *favelas*³⁵) and the regularized, 'official' part of the city (known as the *asfalto*, or 'asphalt'³⁶). So, while the argument mentioned above certainly does not explicitly target poor, peripheral residents, it would be naive to pretend that its force did not rest on the latent image of a helpless middle class surrounded by criminal-infested peripheral areas. This fact alone behoves researchers to probe into the realities—as opposed to the myths—of firearms demand in peripheral areas.

And indeed, firearms demand in peripheral areas is importantly different from among the middle class. Though almost without exception populated in their majority by law-abiding citizens, these communities nonetheless tend to constitute a nexus of limited or ineffective police presence, scant licit economic opportunity, ample illicit economic opportunity, and access to (illegal) firearms. Moreover, the advent of organized drug trafficking and (to a far lesser extent) property crime presents an entirely different dynamic of demand for firearms than the generalized sensations of insecurity that lead individuals to obtain firearms.

Another important difference is that whereas the dynamic of middle-class demand is thought to be more or less similar across Brazil (justifying the use, in the other studies in this Special Report, of Rio as an exemplary case that, we hope, reflects with some accuracy the nation as a whole), it is widely known that the *favelas* of Rio are highly anomalous. Nowhere else in Brazil has the local drug trade come to be dominated by a handful of city-wide syndicates (known as *facções criminosas*, or 'criminal factions'³⁷), and nowhere have such groups established the frightening degree of territorial dominion over peripheral areas as that seen in Rio's *favelas*. Such stark differences have led

many researchers either to focus exclusively on Rio, or else to exclude Rio from comparative studies. This is a mistake: in fact, we can gain important insights by comparing the reality of life in peripheral communities where criminal organizations are smaller and less dominant to the situation in Rio.

To this end, after completing an initial study of firearms demand in Rio de Janeiro, I made field visits to nine peripheral communities in three other Brazilian cities: Porto Alegre, Recife, and São Paulo. I interviewed residents, local police officers, and former or current members of criminal organizations in all the communities visited. To my surprise, I discovered that while on average the local drug trade was more fragmented in these cities, a great deal of variance could be observed among the drug markets in peripheral communities.

At one extreme, large numbers of very small drug operations, sometimes only three or four people, competed with one another over very small pieces of turf. At the other, drug bosses had managed to consolidate control over entire neighbourhoods, amassing stockpiles of armaments and outfitting personal armies. While none of these operations reached the extreme level of organization seen in Rio, the real difference lies in the observed variability of drug market concentration: in Rio, the *comandos*³⁸ have remained the dominant actors for decades, whereas in the three cities studied, big bosses rose to power and consolidated control, only to be eventually arrested or killed, whereupon infighting ensued and the drug market returned to a fractured state.

In comparative perspective, it becomes clear that the degree of organization and territorial control of local criminal organizations (usually, but not always, involved in the drug trade) has a decisive impact on the dynamics of firearms demand, not only in terms of the criminal organizations themselves, but also in terms of those residents not involved in crime. We will see that many of the factors affecting demand by different groups vary in accordance with the level and structure of dominance by such armed non-state actors. Indeed, it becomes apparent that Rio is, in many ways, an extreme case of dynamics observable elsewhere to lesser degrees.

I analyse demand in terms of three distinct groups. The primary distinction, already hinted at, is between criminals (*bandidos* or, in the case of the drug

trade, *traficantes*) and law-abiding citizens (*trabalhadores*, or ‘workers’), which we can take to mean people who are not regularly involved in criminal activity. This distinction is of crucial importance in the sociology of life in peripheral communities: consider the following case from the police blotter of the *Folha de São Paulo* (Brazil’s newspaper of record):

The young boys Wellington Santiago Oliveira Lima, 11, and Luciano Rocha Tavares, 12, were killed by Rio military police during an operation in the Estado favela, in Niterói (15 km from Rio). Another two minors and a youth also died. The police claim the victims were traficantes, including the two children. Residents, however, deny the accusation.

The 12 MPs involved in the action, in which no policeman was hurt, are under investigation and were transferred to other battalions. . . .

‘History shows that children do participate in the drug trade . . . I am certain they were part [of the drug trade],’ said the commanding officer.

—*Folha de São Paulo*, 2005; author’s translation

Notice that the commanding officer’s justification for massacring five children—as well as the residents’ protest against it—hinges entirely on whether or not they were *traficantes*, a line so stark that crossing it not only makes a person a criminal, but a fair target for extrajudicial extermination. Maintaining one’s public status as a *trabalhador*, although it does not guarantee safety by any means, is certainly a factor of protection. As we will see, firearms demand among law-abiding citizens in peripheral areas, although driven by some of the same fundamental motivations as in the middle class, is subject to additional factors and constraints—some of them arising from the need to maintain the distinction itself.

The second group I focus on is peripheral at-risk youth whose demand for firearms overlaps with their desire to enter into a life of crime. To varying degrees (depending in part on the level of dominance by criminal organizations), obtaining a gun is part and parcel of a decision to become either a drug dealer or a property criminal (or both), and hence can only be understood as part of a life decision. The underlying motives here—a desire for status, power,

access to women, and income—are fairly distinct from those driving middle-class demand, though as in the case of law-abiding citizens, they are strongly affected by the nature of local criminal organizations.

Finally, I analyse the dynamics of the criminal organizations’ own demand for firearms. In some sense, this is the heart of the matter, since it is these groups that amass the terrifying arsenals of war that make headlines. This is also the sector where comparative analysis is particularly fruitful. One conventional view, based on looking at the Rio case alone, argues that armed criminal groups have excess demand for weapons in general, the bigger the better, and that the huge military stockpiles seen in Rio are the result of loose supply. My research suggests, however, that drug syndicates only demand automatic weapons in certain situations, often in response to the tactical situation they find themselves in. A better understanding of this dynamic could be crucial in restraining or even reversing the militarization of criminality in peripheral areas.

Sources

Sources for this chapter were:

- semi-structured interviews with residents, and ex- and current *traficantes*³⁹ from peripheral areas in Rio, São Paulo, Recife, and Porto Alegre, conducted between February and July 2005;
- additional interviews with police officers, government officials, and researchers;
- the original source interviews carried out by Luke Dowdney for his 2003 book, *Children of the Drug Trade* (Dowdney, 2003); and
- focus group interviews with women involved in the drug trade carried out by Galeria and Moura (2007).

Demand among law-abiding citizens: weak motives, high costs

In principle, the same motives that drive middle-class citizens to desire firearms can motivate peripheral, law-abiding residents: a sensation of insecurity, lack of confidence in police, and previous victimization. However, there are

Table 3.1 **Victimization rate by type of crime and income bracket in Brazil, 1997–2002 (n = 2,800)**

| Victimization rate, 1997–2002 | By monthly salary | | | |
|-------------------------------|--------------------|---------------------------|-----------------------------|----------------------|
| | <BRL 400 (USD 170) | BRL 401–800 (USD 171–340) | BRL 801–1,600 (USD 241–681) | >BRL 1,600 (USD 681) |
| Motorcycle theft* | 18 | 24 | 21 | 25 |
| Car vandalism* | 13 | 19 | 27 | 24 |
| Car theft* | 17 | 16 | 15 | 19 |
| Robbery | 13 | 16 | 16 | 28 |
| Theft | 10 | 12 | 11 | 13 |
| Physical assaults and threats | 7 | 8 | 5 | 10 |
| Sexual incidents | 4 | 5 | 4 | 4 |
| Average | 12 | 13 | 14 | 16 |
| Five-year prevalence | 39 | 49 | 51 | 64 |

* Among owners of these items.

Source: ILANUD (2002)

a number of factors that may mitigate this type of demand. Firstly, although firearms-related homicides disproportionately victimize low-income residents, property crime—the principle category of crime thought to be preventable through gun ownership—is actually far more common among the wealthier segments of the population.

Of course, one important reason that the rich suffer more property crime is that they have more to steal. But it is also the case that when criminal organizations take over peripheral neighbourhoods, they often enforce a kind of rough ‘law and order’ that includes bans on intra-neighbourhood property crime, aggression, violence, and other actions that would be likely to draw the attention of the police. Where these groups’ dominion is absolute, as in the *comando*-dominated *favelas* of Rio, burglary, mugging, and street violence—the very types of crime that the middle classes fear (and which they buy arms to protect themselves against)—become astonishingly rare:

Order within the community, the people feel there is order. A small business, for example . . . Outside [the favela], you would have to put security guards, cameras, but inside, no. Nobody will touch anything.

—Ex-resident (1987–2001) of Rio *favela* dominated by the drug trade

As such, armed criminal groups can provide security *within the limited scope in which a firearm might offer protection*. This does not mean that the *comando*-dominated *favelas* are safe:

This type of security, as in public order, sure, OK. Now, security as in a feeling of physical integrity, the people don’t feel safe with the drug trade. On the contrary, there is always a risk of invasion, a risk of a confrontation with the police.

—Ex-resident of Rio *favela* dominated by the drug trade

In the case of invasion by a rival syndicate or the police, though, having a firearm is unlikely to make one safer, and could conceivably make things worse: a firearm identifies a person as linked in some way to criminality, and perhaps the ruling syndicate.

Another crucial factor affecting demand in this segment is the extent to which criminal organizations practise a form of gun control within the communities they operate out of. Again, this depends on the degree of local domination, with Rio providing the extreme case. In part to maintain their monopoly on force, in part to avoid ‘confusion’ and conflict among residents, Rio’s *comandos* generally enforce strong gun control measures:

The traficantes know who has guns and who doesn’t.

—Resident of Rio *favela* dominated by the drug trade

The result is not the complete absence of firearms, but a situation in which there are few open paths to firearms ownership:

It’s not just anyone who can own a gun in the favela.

—Resident of Rio *favela* dominated by the drug trade

Informants consistently described a very limited number of situations in which a resident not involved in trafficking would feasibly purchase or possess a firearm, if he:

- 1) is an old, well-respected member of the community;
- 2) works as a security guard or fireman;
- 3) is an autonomous thief;
- 4) has personal relationship with the *dono*⁴⁰ and obtains permission; or
- 5) obtains and possesses gun in secret.

Each of these possibilities is, in its own way, problematic. Cases 1 and 2 are not open to most residents, but rather represent specific life situations. Cases 3 and 4 carry with them the social stigma of association with crime and the drug trade, and do not apply to the law-abiding citizens that we are discussing here. Case 5 is open to anyone, but is particularly risky: the punishment for obtaining a gun and not informing the local boss could be severe.

Two points further diminish the potential value of a firearm in these situations. Firstly, it is possible that the gun could be requisitioned by force:

I've gone many times to grab [a firearm] myself, from a guy who was a security guard in the community . . . Somebody's invading the community: 'The dono sent me to round up the guns'.

—Ex-trafficante, Rio, 25 years old

Secondly, with the possible exception of case 3, the owner of the firearm would not be able to carry it openly in public:

If [someone who is not a traficante] buys a gun, he won't go showing it off, no way. Nobody will know. It will stay hidden.

—Ex-trafficante, Rio, 25 years old

In other cities, the local drug trade tends to be smaller and more fractured, and hence cannot dominate a community to the extent of the *comandos* in Rio. As a result, the relationship of *traficantes* to law-abiding residents is different. Drug bosses may make demands, backed up with threats, of individuals, and will certainly punish anyone who provides information to the police, but the wholesale imposition of social order is rare. In the communities I visited with fragmented drug markets, property crime and intra-neighbourhood violence were high, and feelings of insecurity were widely reported.

At the same time, smaller criminal organizations with little or no territorial dominion cannot effectively monitor, much less chastise, the local population.

Consequently, the kind of gun control exercised by *comandos* in Rio was not present in the vast majority of communities studied:

Q: But if [a law-abiding resident] wants a gun, do you think he'll have a problem with the boss, with the drug trade? Will somebody come and tell him . . .

Traficante (T): No. He won't have a problem. If he keeps in his place, stays respectful, then it's his business.

—Traficante, 26 years old, Recife

If I or any other resident want to have a firearm, we would never need the boss's permission. If he finds out that you have a firearm, as long as you don't threaten his business, he won't even care why you have it.

—Ex-armed robber, 28 years old, São Paulo

Yet strong incentives still lead residents to keep gun ownership a secret:

If [the traficantes] find out you have [a gun], when the day comes that they need one, they'll come right up to you and take the gun . . . Either he knows you, respects you, and you've got your gun, or you've got your gun and it's . . . hidden.

—Favela resident, Porto Alegre

Conclusion: demand for firearms among law-abiding citizens is likely to be less strong in peripheral areas than among the middle class, since peripheral residents face additional costs to gun ownership arising from the possibility of being associated with or identified as a criminal. Where criminal organizations are stronger, their provision of social order weakens the original motivation for gun ownership, while their enforcement of gun control further raises the price of gun ownership. Both of these effects act to reduce demand for firearms in this sector.

Demand among at-risk youth: 'to live a little like a king, or a lot like a nobody'

For youth in marginalized communities, the underlying motives behind firearms demand are very different. With little personal property to protect, the

issue is not personal security. Rather, gun ownership, and the move to a criminal lifestyle it represents, alters the status of the owner within the community, bringing him power, respect, and—perhaps most importantly for this age group—access to women.

Given the enormous costs mentioned above, this is more than a simple decision about consumption or resource allocation: it is an existential choice. It is easy to assume that youth who get involved are not competent to make this choice and that they do not possess full information, i.e. that any choice to get involved in such a life is, in short, irrational. But we should remember that the opportunity cost of joining a criminal outfit is low: peripheral residents have extremely poor educational and economic opportunities, enjoy few public services, face prejudice in the work market, and are at the bottom of one of the most unequal income distributions in the world. As such, it is not implausible that youth enter the criminal world fully conscious of what they are doing. A young resident in Porto Alegre, paraphrasing a popular rap song, put it this way: *‘É viver pouco como um rei, ou muito como um zé’*: ‘Live a little like a king, or a lot like a nobody’. It is a choice few of us will ever have the chance to make.

In this context, the expected return to entering the drug trade (or some other criminal enterprise), compared with the opportunity cost of a youth’s next-best option, can be the decisive factor in determining demand for firearms. As elsewhere, the more organized local criminal organizations are, the higher the perceived benefits of membership. In Rio, particularly where the local drug trade is strong, drug dealers have, in relative terms, spectacularly high incomes:

Q: Do you think traficantes look different from the average guy?

Traficante (T): Yes.

Q: How? Explain this to me.

T: Walking around, in nice clothes, new sneakers, fancy watch, and everybody looking at the traficante with jealous eyes.

—Soldado,⁴¹ 16 years old

And command respect from residents:

Now it’s not like it was, everybody talks about respect, many of those who used to beat up on me are afraid of me now, they think I’ll do something to them.

—Fiel do dono,⁴² 16 years old

To many youth, the firearms that faction agents wield openly are more than a symbol, but rather the physical manifestation of power and status:

You know how it is. A baile⁴³ in the community, the kid wants to get in, he thinks he’s got the right: ‘Shit, I can’t go in because I’m not a traficante, and that guy there can because he’s got a gun.’ The kid grows up seeing all that; it’s fucked.

—Gerente de soldados,⁴⁴ Rio, 17 years old

Indeed, a firearm may be a manifestation of power and status not only in a material sense, but in a sexual sense as well:

You look at the gun and see it as power. Because the power is really in the gun. The girls see it too. If he’s armed, he’s respected . . . he’s got power right there in his hand. The girls want to be close to him, to feel protected, and even admired.

—Traficante, 26 years old, Recife

Women residents confirm this:

You take the ugliest guy in the world; if he’s got a gun, there will be ten women trying to get with him. He doesn’t need to be handsome.

—Female resident of Rio *favela* dominated by the drug trade⁴⁵

While the vast majority of *traficantes* are men, the material and non-material advantages of being involved in the drug trade are not lost on women:

[A girl] goes out with a [traficante] because she wants the good life, easy money, brand name clothes, to feel more powerful, to show off in front of others . . . If she goes out with a worker, her life won’t be the same. So she likes that her man is a traficante.

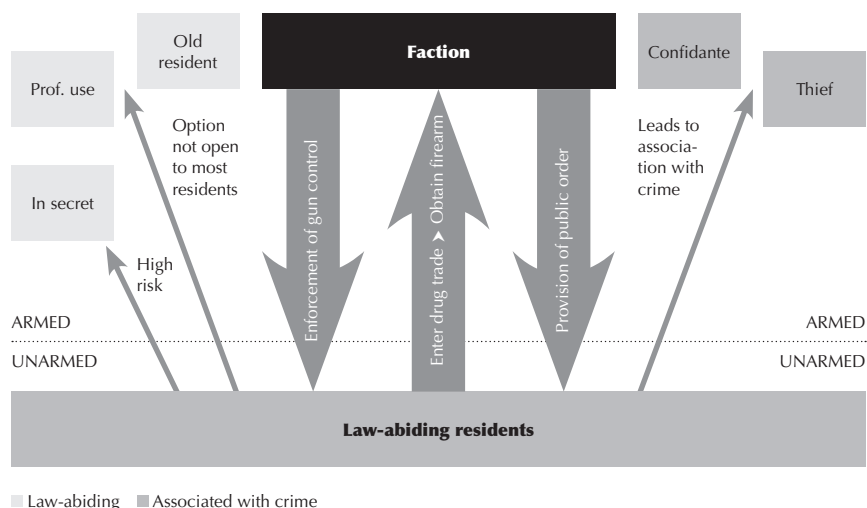
—Female resident of Rio *favela* dominated by the drug trade

Conclusion: for many young men in peripheral areas, then, gun ownership is part and parcel of an all-encompassing and potentially irreversible lifestyle

choice; obtaining a firearm and becoming a criminal are, in the end, a single decision. Where criminal organizations are small and fragmented, the expected benefits from membership are likely to seem smaller and less appealing, at least to a wider swathe of youth. Where these organizations are more profitable and powerful, joining is more appealing to youth, and demand for firearms, which in this context converges with demand for membership, increases. In Rio, the power of the *comandos*, combined with the mechanisms discussed in the previous section, makes joining the drug trade the primary path to gun ownership; see Figure 3.1.

In terms of demand reduction, it seems logical that if the deep preference operating in this sector is for status, material wealth, or a sense of belonging, the best strategy for reducing demand is providing alternative paths to these ‘goods’. Social projects aimed at youth, and particularly young men, can be effective at providing an alternative source of group identity and status within the community. As Dowdney (2005) has shown, the existence of such positive influences—whether in the form of family, sports or cultural organizations, or even religious identity—may have a decisive effect on an individual youth’s decisions about getting involved in criminal activity and, hence, obtaining firearms.

Figure 3.1 **Paths to gun ownership in Rio de Janeiro’s favelas**



Demand for firearms among criminal organizations: arms as capital

Rio’s drug syndicates: structure and strategies

In virtually every community studied, some form of drug trafficking was present. The vast majority also registered groups or individuals involved in property crime.⁴⁶ In all cases, firearms represent an important input for illegal criminal ‘production’: they are a kind of capital stock that criminal organizations invest in, accumulate, and maintain over time. However, the types and quantities of arms an organization seeks to acquire—its ‘firearms investment strategy’, if you will—are part of a larger strategic outlook that depends on an organization’s structure, size, and relative level of local dominance, and the nature of the threats it faces.

For all of its negative impacts on *favela* communities and society as a whole, the consolidation of the drug trade in Rio into two or three syndicates with similar, replicated internal structures allows for a degree of generalization and abstraction that is not feasible in the more heterogeneous settings seen in the other cities studied. Indeed, quite unlike Rio, the level of drug market concentration varied not only among communities, but within single communities over time. However, many aspects of firearms demand are correlated—indeed, can be seen as indicators of the level of concentration and organization of the local drug market. As such, it is helpful to think of Rio as a paradigmatic case or ideal type, with firearms demand dynamics elsewhere approximating those in Rio to the extent that local criminal organizations approach the level of domination seen in Rio. We begin with a discussion of the key role firearms play in the overall strategy of Rio’s drug syndicates.⁴⁷

The drug trade in each *favela* is run by a *dono*, or boss, who is usually a member of one or another syndicate. Each boss maintains a high degree of autonomy over the operation(s) under his control, but the syndicate leadership (mostly imprisoned) coordinates actions among bosses, enforces codes of mutual aid, aids in the process of succession when a boss is killed or arrested, and intervenes in cases of disobedience or intra-syndicate fighting. Powerful bosses, sometimes with help from syndicate partners, will invade the *favelas* of a rival syndicate, taking control of strategic strongholds and lucrative points of sale.

This risk is complicated by the presence of the police, who at times protect *favelas* from invasion, at other times may actually condone and even facilitate an invasion. Firearms are a crucial resource in the processes of expansion and defence, and play a key role in bosses' overall strategy.

A drug boss carries on his business activities in a context of extreme uncertainty. He faces two constant, grave threats: invasion by a rival faction and incursions by the police. A successful invasion by a rival syndicate probably means death or expulsion for members. Police incursions can lead to prison, extortion, kidnapping, torture, or death for syndicate members. At the same time, a boss must maintain control over the community in which his 'business' is situated. This requires shows of force as well as beneficence. Good community relations are crucial to minimizing the damage from police incursions, when it may be necessary to hide drugs, weapons, and people in law-abiding citizens' houses, as well as deterring enemy syndicates from invading.

In this context, maximizing profits, while important, is only one goal among many in a broader strategy for self-preservation and growth. Indeed, bosses use part of their profits to pursue other crucial resources, each of which plays a strategic role.

- **Accumulation of force:** Numbers on the ground and firepower are the measure of a boss's power. Within the community, they confer status and authority. In the case of invasion, they offer defence. When held in sufficient amounts, they permit the invasion of other territories.
- **Deterrence:** It is not enough to have weapons; the enemy must know you have them. Ostentatious display of firepower, including seemingly wasteful 'burning' of ammunition at *bailes* and long, often fruitless automatic fire exchanges between neighbouring *favelas* (often using tracer ammunition), give a drug operation *moral*, or respect, both inside and outside.
- **Dominion:** A drug operation's strength also depends on the extent to which it controls its own community, and its potential for expansion into new territory.

Accumulation of these commodities allows the syndicate to undertake actions that reinforce other strategic elements.

Actions can be directed inward, towards the community, or outward, towards external threats (enemy syndicates and police).

Figure 3.2 **Commodities and goals of drug bosses**

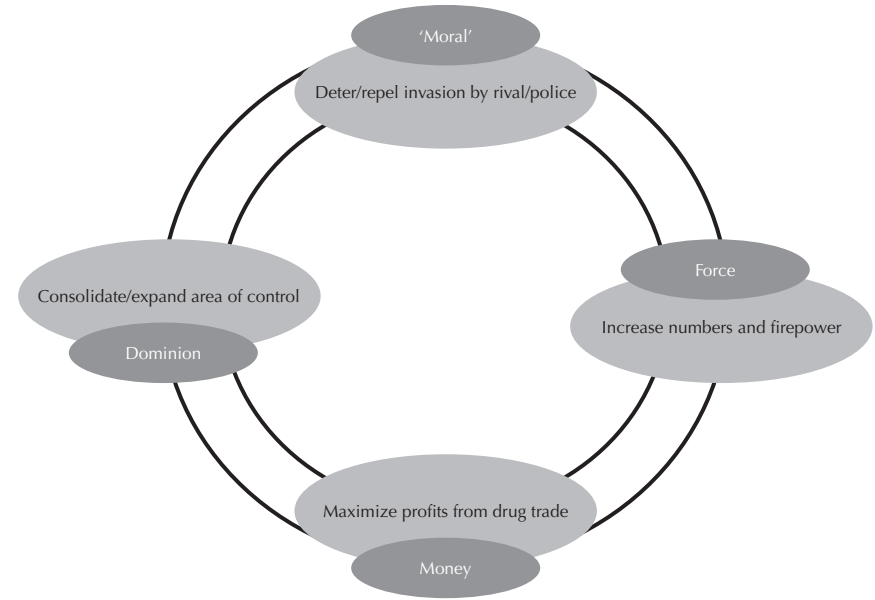
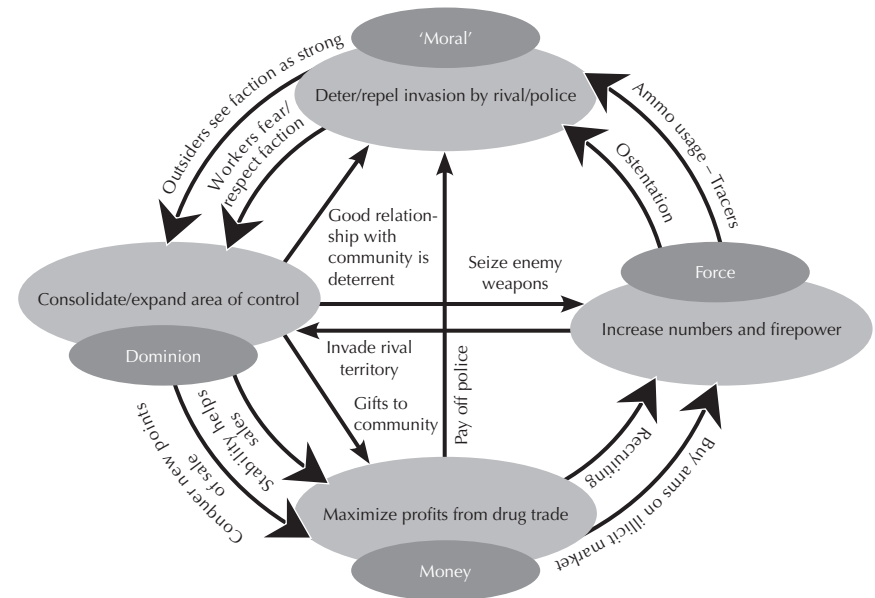


Figure 3.3 **The actions of drug bosses and their impact**



Demand dynamics in comparative perspective

To better understand the dynamics of firearms demand in Rio, it is helpful to compare a number of component aspects across a range of situations, with Rio's powerful, dominant syndicates at one extreme and highly fragmented local drug markets—composed of a large number of small drug operations—on the other.

Box 3.1 Property crime vs. the drug trade

In Brazil, the news media commonly refer to all those involved in the illicit drug trade simply as 'bandits', thus conflating two different kinds of illegal activity. Although it is certainly the case that some *traficantes*, in addition to procuring and selling drugs, also practise or are complicit in other criminal activities, especially robbery, car theft, and other forms of property crime, it is nonetheless important to draw a distinction here, for a number of reasons.

First and foremost, in some communities, particularly those with a well-consolidated local drug trade, people involved in trafficking are unlikely also to be involved in property crime. Frequently, two (or more) 'camps' form, with each group performing its illegal activities while interfering as little as possible with the others:

So when we enter we have to choose an area. If we switch to another area, we have to leave the area where we are. So that somebody else can come in. We can't take somebody else's spot.

—*Traficante*, 26 years old, Recife

It's up to each person to decide what he wants to do. He might start in traffic, then decide he wants to rob; it's up to him. Everybody does his thing, as long as he doesn't hurt anyone else.

—*Traficante*, 36 years old, Recife

On the other hand, in some communities, especially those with numerous small drug-trafficking operations and no single *dono*, there may be little or no distinction between drug trafficking and property crime:

One day a kid sells, next day he robs, next day he's just a user.

—*Favela resident*, Porto Alegre

While some informants reported cooperation between these camps and even the supplying of armament and munitions (see the section on 'Automatic weapons', below), in other cases this relationship is marked by competition, intimidation, and outright confrontation.

Secondly, the two activities by their nature present different dynamics in terms of organization, income generation, strategy, etc., all of which can be expected to generate different characteristics of firearms demand. Property crimes are usually carried out by individuals or small groups, generally outside of the communities where criminals reside. The activity

itself is by its nature sporadic, and the flow of 'profits' is unpredictable. Between jobs, it may be necessary to hide or 'lie low'. These factors make organization and collectivization more difficult. Firearms demand tends to be determined on an ad hoc basis, depending on the nature of individual jobs.

The drug trade, on the other hand, is a more or less constant activity that occurs within communities. It requires at least some degree of territorial domination, as it is essentially sedentary (Soares, Bill, and Athayde, 2005). It involves routinized tasks such as packaging, distribution, accounting, lookouts, etc.; at the same time, it generates a steady stream of profit, making possible the establishment of a regular working routine for 'employees', and in some cases the payment of a fixed salary. All of this contributes to a potential for organization and hierarchical structure, though it by no means guarantees such a structure. In terms of firearms, it provides an incentive to accumulate weapons, arm employees, and deter potential rivals.

A final distinction to consider is of a moral or legal nature. Defenders of drug policy reform often argue that drug use is a 'victimless crime'; a similar argument (that nobody is forced to purchase drugs) could be applied to the drug trade as a whole. Whatever the flaws in such an argument (e.g. the fact that drugs provoke addiction, or that drug traffickers frequently victimize members of the communities they dominate), there is a useful distinction to be made between consensual economic exchange between individuals of which the state disapproves and the non-consensual acquisition of somebody's property by force. Nor is the distinction merely philosophical: armed robbery is unthinkable without an arm; *traficantes*, on the other hand, need firearms primarily because their enterprise is illicit and, as such, enjoys no legal mechanisms for conflict resolution nor protection of private property (Miron, 2004).

Collective ownership of firearms

One of the defining characteristics of firearms demand in Rio is the collective nature of acquisition on the part of each drug operation, or '*boca*'.⁴⁸ Firearms are bought and owned collectively by the *boca*, and 'loaned' to members while on duty (Dowdney, 2003).

Q: And this gun here, is it yours, or does it also belong to the boca?

T: This here belongs to the boca.

Q: So nobody needs to buy guns; [they] belong to the boca?

T: Belongs to the boca. It's ours to carry. The boca owns it, but the right to carry is ours.

—*Soldado and ex-gerente*, 18 years old

An individual *traficante* purchasing his own gun is described as rare, in part because it could be requisitioned by the *boca*:

If [a traficante] has the money to buy [a gun] . . . It will be 'his', I guess, because he bought it with his money, but at the same time, it belongs to the faction, to the boca. Because if it is needed, if he's not on duty and another traficante needs the gun, he'll take it and use it.

—Ex-traficante, 25 years old

Somewhat surprisingly, in settings with a smaller, more fragmented drug trade, this practice of provision of firearms by *donos* (bosses) or *gerentes* (managers) to low-level employees was nearly universal in the communities studied, even those without a high degree of organization:

Guns are like this, man: the dono doesn't give you one. You hold on to it, but you have to give it back to the boca. It's a gun for you to have just while you're there.

—Traficante, 19 years old, São Paulo

The gun belongs to the boca.

—Ex-traficante, 21 years old, São Paulo

Q: *Does the gun belong to the boca?*

T: *Yeah.*

—Traficante, 36 years old, Recife

On the other hand, ownership of a private firearm by *traficantes*, described as rare in Rio, was quite common elsewhere, possibly obviating the need to use one of the *boca*'s guns:

There comes a time when you have your own gun. 'This one here is the boca's, but I have my own', understand? It's normal. You can have one.

—Ex-traficante, 21 years old, São Paulo

When you don't have [a gun], you do it like that: grab a gun, but when you leave, you have to return it. But lots of people have their own, you know.

—Traficante, 26 years old, Recife

Moreover, whereas in Rio, an individual *traficante* who purchased a firearm of his own might be forced to give it to the collective in times of need, this was seen as unlikely in the communities studied outside Rio:

[The gun] is yours. Nobody there can take anything from anyone. They can ask, and if you want to give it up . . . but take it, no. There is respect, you know? What's yours is yours.

—Traficante, 26 years old, Recife

Ammunition

As with firearms, ammunition is provided to on-duty drug traffickers by their bosses or managers in virtually all the communities studied. Interestingly, although the notion of controlling firearms use through stricter controls on ammunition is new to Brazilian public policy, a number of respondents suggested that bosses have incorporated this technique into the routines of their employees as a means of control:

It's like this . . . in the morning the guy comes, you count the stuff, it's all there, counted and everything; 'Here's the gun . . . police came, some stranger came in, I fired'. You know, the balance.

—Traficante, 19 years old, São Paulo

Q: *Does it ever happen that when its time to return the gun, the gerente says, 'Hey, where's the ammunition? You used five bullets.' Does he demand to know, or not?*

T: *It's little things like that that can lead to death there. Like I said, somebody always ends up screwing up, however trifling.*

—Traficante, 26 years old, Recife

The issue here, it seems, is not the cost of the ammunition per se, but rather the careless use of the *boca*'s weapons, particularly in a way that might attract police to the locale. This aspect is of great importance to small operations in areas that are geographically vulnerable to police incursion.

In areas of strong territorial domination such as Rio, more wasteful use of ammunition can be observed. As explained above, this is related to the practice

of ostentation, which is a means of establishing local hegemony and communicating to rivals the extent of one's armed power. It also reflects the easiness of supply of ammunition. Frighteningly, some small-scale recharging machines have been seized by police and even handed over to Viva Rio's arms collection post, and anecdotal evidence suggests that some factions may possess larger equipment.

In communities where the local criminal organizations do not practise a strong form of gun control, bosses may use their local monopoly on ammunition as a way of controlling arms use in their areas:

[The dono] could even be your supplier of ammunition. Your ammo won't last forever. So there will come a time when you'll have to buy some, and you'll have to buy it from him.

—Ex-armed robber, 28 years old, São Paulo

Ammunition, I think it's a bit more complicated, because it's a more restricted item. But it's also easy to get, just not as easy [as a gun]. Someone shows up, 'Hey, there was a problem in my house, so-and-so slapped my mom in the face, I'm going to go kill the guy.' 'OK, take this gun . . . now you've got this many bullets, ok?'

—Favela resident, Recife

Salary/commission

In general, *traficantes* earn a commission on drug sales rather than a fixed salary. Payment may come in the form of a share of day- or week-end profits, or it may simply be an extra quantity of drugs for a *traficante* to do with as he pleases:

Q: So they don't earn salaries, huh?

Respondent (R): No. If you work for a traficante, he probably gives you a percentage of what they sell. Either in money, or in drugs.

—Favela resident, Porto Alegre

However, in Rio it is common for those not directly involved in the sale of drugs—and particularly those providing armed security—to receive a fixed salary:

[The seller] gets a cut of whatever he sells; there is no fixed salary. If he doesn't sell anything, he doesn't earn anything; if he sells a lot, he earns a lot . . . Now the soldiers . . . security has a fixed price. You'll make 200 a week, 300, 400.⁴⁹

—Favela resident with knowledge of the drug trade, Rio⁵⁰

Such fixed salaries were not reported in the other cities studied, even in relatively organized areas:

T: You take your commission, there is no fixed salary, just a fixed work shift.

Q: But the soldier there giving cover, he earns . . .

T: He earns a percentage of [the profits from] the day he is there.

—Traficante, 26 years old, Recife

Relationship with police

In an interview for this paper, researcher and specialist on organized crime Guaracy Minguardi of the UN's Latin American Institute for the Prevention of Crime and the Treatment of Delinquents (Instituto Latino Americano das Nações Unidas para Prevenção do Delito e Tratamento do Delinqüente) made the following observation about Rio:

There is a rule, and Rio is the only place I know where the rule doesn't function, which is 'never kill a cop'.⁵¹ If you kill a cop, you create a confrontation you don't need, that you could have resolved with money . . . Police are to be bought off.

Of course, *traficantes* in Rio do their fair share of buying off of police as well. On a day-to-day basis, it is police corruption more than the brute military power of *traficantes* that allows the drug trade to continue. What sets Rio apart is that when accords break down, or orders come down to officers from on high to invade, *traficantes* will frequently stand their ground rather than run and hide. This leads to the spectacular confrontations involving hundreds or even thousands of troops that fill media reports on Rio's drug war. Incredibly, not only have Rio's syndicates, on average, successfully held their ground against police repression over the years, they may deliberately strike at police outside the *favela* as a form of retribution or intimidation.⁵²

Outside of Rio, in virtually every community studied, confrontations were the exception and not the rule:

Q: Do the police come in and try to capture the boca? You know, invasion, with heavy armament, shootout, confrontation?

R: No, no, that doesn't happen. Here, no, at least not that I've seen.

—Ex-armed robber, 28 years old, São Paulo

Q: Do you have this sensation that it's a war?

T: No, because there's never a confrontation. I don't think it will get to the point of actual confrontation, you know? Cops and robbers, here just happens in the movies.

—Traficante, 24 years old, Porto Alegre

Q: In your community, is there confrontation with police?

T: No, no. Never. Principally because we don't like that kind of thing. The police do their job, we do our job . . . They come, they go. If they see someone selling, they take him away. If they don't find anybody, that's that, and they leave.

—Traficante, 36 years old, Recife

In areas with numerous, small-scale *bocas* and little organization, individual *traficantes* and property criminals seem to live at the mercy of police, who use their power to arrest as a means to extort:

The police here are so corrupt! . . . If he stops you and sees that you've got a nice gun . . . if it's just a .38 he'll look at you and say, 'Hey bum, this is a bum's gun. What a joke! Get in the car', and they take you in. Now if he catches you with a .40 or a .45, then it's, 'Wait a minute, let's talk . . . so, what else have you got for us?'

—Traficante, 19 years old, São Paulo

I ended up getting busted for the first time. I made a deal with the police using the money we had just robbed, which was a fair amount. And the police didn't want to lose this money . . . If they'd arrested me, as I was a minor, I would have gotten out right away and the money would have gone back to the owner. To avoid this, they made a deal, they took all the money we'd stolen.

—Ex-traficante, 28 years old, São Paulo

Where the drug trade is more organized, police corruption also appears to be more routinized:

T: There is a whole scheme, even with DVDs, the police always get a cut. So, they provide cover . . . for everything that goes on.

Q: The police don't arrest anyone?

T: No. They come in, but they don't arrest anybody.

—Traficante, 26 years old, Recife

The police themselves get everything for us, they grease the wheels. Ammunition, firearms, everything. With the police, we know who to buy guns from. He gives us the gun, we call, the ammunition is delivered. Cash on the barrelhead.

—Traficante, 26 years old, Recife

In general, accords of this type are made with a small group of police directly responsible for the area in question. When orders come from above to carry out an operation, or officers are rotated, the accord may break down. In this case, low-level confrontation was reported:

Because the police there are not so numerous, so it's possible to confront them and go on the attack, like the time four policemen were killed when they tried to come in. But we're afraid that they will come en masse.

—Traficante, 26 years old, Recife

Still, out-and-out confrontation is a losing proposition for the drug trade:

I think they are just waiting for the right moment to really invade . . . well-armed, to put an end to it all. We're always buying guns, but we know that if the police wanted to really invade, we'd have no way to really confront them, no matter how many guns we have. We would have to confront them, but we know we won't be able to, you know? Because if they are really prepared, no matter how many kids we have, we won't have as many as the police. We've got bullet-proof vests, but not enough for everyone. When the police come, everyone has a vest. It would be pretty difficult to hold our ground. That's why we try to minimize confrontation with the police.

—Traficante, 26 years old, Recife

Risk of invasion by rivals/infighting

Another crucial aspect of a drug operation's demand for firearms is the threat it faces from rivals. Most of the communities I visited outside of Rio lacked a single *dono*, with small drug-trafficking outfits dominating small pieces of territory and occasionally fighting with one another. However, this fighting generally took the form of skirmishes, individual assassinations, or revenge killings, and only on rare occasions an all-out battle. Even when such battles do occur, they are ultimately struggles for control of a community by residents of that community. What sets Rio de Janeiro apart from the other cities visited more than any other single factor is the phenomenon of invasion:

The neighbouring favelas, they know that in this place it's no longer possible for another movement to come in. This space here is demarcated. As long as that dono is here, the movement is here, nobody will invade.

—Ex-*traficante*, 21 years old, São Paulo

Here there is no way you could have that kind of 'I'm from a neighbourhood over there and I want to invade and take over this neighbourhood here, it's mine. I'm taking over here.' No. That doesn't happen here.

—*Traficante*, 24 years old, Porto Alegre

Q: Are their gunfights . . . with assault rifles? Do you have shootouts with other groups?

T: With other groups, no. With the police.

—*Traficante*, 26 years old, Recife

Q: So when you are like, 'We need to beef up our forces' . . . is the threat coming from outside [the community] or from within?

T: From outside.

Q: But is it the police, or is it rival groups?

T: No. It's more the police. Other groups no . . . Each community has its power . . . a group [from outside] if it tries to invade, it won't leave again. So, they stay out.

—*Traficante*, 36 years old, Recife

Nor did these groups seem interested themselves in invading rival territory:

It's never happened with us, no, wanting to invade [another community].

—*Traficante*, 36 years old, Recife

In reality, even in Rio successful invasions—ones that lead to a permanent change in syndicate control of an entire *favela*—are somewhat rare, a few per year. There are easily comprehensible reasons for this: dominating a 'foreign' population is always a difficult proposition, made more complicated by an invading faction's vulnerability to police.

Automatic weapons

No aspect of gun violence in Brazil garners as much attention—much of it deservedly so—as the possession by criminal organizations of automatic, military-style weapons. Due to media saturation, the image of *traficantes* and Rio police engaged in all-out firefights, with machine guns blazing, has become a commonplace. This is not a misperception: as Rivero shows in her study (Chapter 2), automatic weapons are a familiar sight among *favela* residents in Rio. Public officials outside of Rio frequently lay the blame for the militarization of the drug war there on insufficient controls on black market weapons, implying that their cities are different because they have done a better job at restricting supply.

My own research suggests that this conventional wisdom may be wrong on two counts. First of all, automatic weapons are more common in peripheral areas outside of Rio than many people realize. Many interviewees admitted having seen assault rifles or sub-machine guns in their communities at some point:

Assault rifles? They do show up, but it's a rarity to see one.

—*Traficante*, 19 years old, São Paulo

Q: Have you ever seen an automatic weapon?

R: Yes. I saw one in a boca. It shocked me. A young kid, who had this, well, I think it was an AR15. The kid was on security detail, and he was kind of showing it off: 'We're right here!' and so on.

Q: Right here [in this community]?

R: Yes.

—Favela resident, São Paulo

Q: What is the largest firearm you've ever seen in this community?

R: An assault rifle. FAL. My ex-brother-in-law had one; he was a *traficante*; he had one . . . These days there are two there, in the neighbourhood down below there are two assault rifles that I've seen.

Q: They also belong to *traficantes*?

R: To the kids we're about to go talk to.

—Favela resident, Porto Alegre

Q: Are there assault rifles?

T: Yes.

Q: Have you ever seen one?

T: Yes.

Q: Have you carried one?

T: Yes. I've carried one.

—*Traficante*, 26 years old, Recife

Nonetheless, roughly one-third of respondents stated that there were no automatic weapons in their communities:

Q: Have you ever seen heavy armament, an assault rifle?

T: The heaviest I've ever seen, actually in person, was a 12 calibre [shotgun]. I never saw an assault rifle, no. Not here or anywhere else.

—Ex-*traficante*, 21 years old, São Paulo

Q: Is there heavy armament here? Have you ever seen any in this community? An assault rifle, an automatic weapon?

T: No. Just .38 and smaller.

Q: 12 [calibre shotgun]?

T: 12 repeating, 12 double barrel, just that and smaller.

—Son and lieutenant of *matador*,⁵³ 24 years old, Recife

Assault rifle, I've never seen. But 12 [calibre], shotguns, I don't know their names. but I've seen many. .38, I've seen many. Now, heavy firearms, I've never seen. Really heavy [armament], just the police have it.

—Favela resident, Recife

Given that communities in all three cities reported the presence of automatic weapons, it seems unlikely that it is merely a lack of supply that keeps some *traficantes* and criminals from obtaining such weapons. Rather, there seems to be little demand; or as one *traficante* put it:

Why aren't there [automatic weapons]? It's like this: the *donos* don't want them, understand? Because if they wanted them, there would be a ton of them.

—*Traficante*, 19 years old, São Paulo

One key reason why demand for automatic weapons might be weak in these communities is the ease with which police may enter. In this context, obtaining an automatic weapon simply sets one apart from the mass of small-scale *traficantes* and gives the police strong incentives to make an arrest:⁵⁴

[My brother-in-law] is in jail. He's in jail because he had a firearm that belonged to the army.⁵⁵ They made him a scapegoat.

—Favela resident, Porto Alegre

On the other hand, where the drug trade is more organized and has attained a degree of territorial domination, automatic weapons are crucial to holding one's ground:

[The assault rifles] stay with the lookouts up in the tree . . . where you can see far, with binoculars . . . the guy with the assault rifle can't run, he's up there in the tree, to shoot at whatever comes in.

—*Traficante*, 26 years old, Recife

This was the only community where heavy armament was not a 'rarity'. In fact, the local drug outfit seemed to have accumulated enough weaponry to rent it out, like idle capital:

The heavy armament . . . assault rifles, grenades, machine guns . . . they belong to the drug trade. There is a stockpile, a kind of warehouse, for actions . . . For example, you're the owner of the heavy weapons, you're responsible for them. So I've got a group that does robberies, and we want to do a big robbery, and I see that my firearms won't cut it, I can go to you and request the guns. Then we do the job, return the guns to you, plus a certain amount [of money] for the guns that you lent out.

—*Traficante*, 26 years old, Recife

Drivers of change in firearms demand: preferences, prices, and resources

Preferences

While the presence of stockpiles of automatic weapons in *favelas* outside Rio is distressing, it also points to an important lesson to be learned about the preferences that drive firearms demand. Criminal organizations make strategic decisions about what types of firearms to acquire, decisions that weigh cost, risk, and tactical usefulness (including ostentation and deterrent effect). Like all strategic decisions, they are interdependent *responses* to the strategies adopted by police and rival organizations. This can be seen clearly in this *traficante's* explanation of the initial militarization of the conflict in Rio:

T: It used to be a lot less serious, now it's much more complicated . . . Now there are bigger fish . . . There used to be .22s, .38s, then the .22s were replaced with AK-47s, with AR15, with Uzis.

Q: Why do you think that happened? The change in armament?

T: Why? Everyone thinks it's because . . . the police were having too easy a time of it, back then they were the only ones with assault rifles, the pigs had assault rifles and we with our .38s. Things have changed, man. Now the same wind that

blows there blows here . . . maybe there's people here in the favela with guns they can't even imagine.

—*Gerente de soldados*, 17 years old

As with any arms race, relative, not absolute, strength counts, leading to a theoretically endless escalation spiral. Shifting demand away from automatic weapons requires removing the threat of invasion by a force armed with these weapons, as well as erecting barriers to the possibility of invading enemy territory not armed with these weapons.

Outside Rio, the overriding priority must be to prevent escalation. Where criminal organizations are small and hidden, police must maintain territorial control and access, and aim to reduce or eliminate fractious infighting and gang warfare. Where groups have established redoubts, police should be careful not to give these groups strong incentives to acquire military-style weaponry.⁵⁶

Authorities should also consider the latent discord between *traficantes* and property criminals (see Box 3.1) as a possible advantage, rather than elide the difference between the two in their rhetoric and action. Where policing places a clear priority on capturing property criminals over repression of drug traffic, *traficantes* have an incentive to restrict the actions of such criminals and, in some cases, to deny them sanctuary within their communities, as well as to order their employees not to practise property crimes. Whether this would happen in practice is unknown, but it certainly seems counterproductive to pursue a policy that encourages *traficantes* and property criminals to cooperate.

Relative prices

Factions must purchase weapons on the illicit market, where supply is erratic and price variation is high, as shown in Table 3.2.

In light of the discussion of preferences noted above, it is interesting to note that each automatic weapon purchased has an opportunity cost from four to as many as 30 handguns.

As with all illicit purchases, there are additional high non-monetary costs associated with illegality, including 1) a necessary association with criminal elements, 2) the risk of getting caught, and 3) the possibility of getting ripped off or blackmailed, with no legal dispute settlement mechanism available.

Table 3.2 **Reported prices in USD of firearms on the illegal market in Rio de Janeiro, 2005**

| | Median price by type | Highest price | Lowest price |
|-----------------------------------|----------------------|---------------|--------------|
| Revolvers | 137 | 238 | 63 |
| Pistols | 569 | 982 | 155 |
| Assault rifles | 3057 | 4,286 | 1,709 |
| Machine guns and sub-machine guns | 1,911 | 4,643 | 1,071 |

Source: Rivero (2005b)

However, the *traficante* is already a criminal, in the eyes of both the community and the police, so the marginal price of 1) and 2) are minimal. The effect of 3) is real, but depends on each instance. In some cases, when suppliers are corrupt police officers, there may be a positive side effect to arms purchases, creating leverage in negotiations over ‘political commodities’ (Misse, 1997) such as ‘permission’ to traffic, pressure on rival factions, or the release of jailed colleagues.

The result is that firearms demand among criminal organizations is highly price inelastic. Once a boss decides he needs a given number of firearms, he will not be dissuaded by even relatively large changes in monetary price. Perhaps the only way to reduce demand through prices is by raising the non-monetary costs, i.e. increasing the risk of getting caught. Police involvement in supplying illicit arms complicates this problem.

Resources

Perhaps the most commonly invoked strategy for reducing firearms demand in Brazil is to ‘starve’ the drug syndicates by cracking down on drug use, thus reducing drug profits, leading to a decline in firearms procurement. While the police may prefer an approach that is far easier and safer than outright repression, this strategy can only work if the following two linkages hold true:

1. repression of drug use by police reduces demand for drugs; and
2. reductions in drug bosses’ income translate to reductions in arms procurement.

Both of these linkages may be weaker than officials would like to admit. Drug prices around the world have held steady or fallen in spite of decades of active repression and billions of dollars in anti-drug efforts. In the case of linkage 2, bosses may be willing to forgo many other goods and services before they reduce spending on firearms, as well as force their employees to accept pay cuts or delays:

R: Sometimes [traficantes’] salaries are late, to save up money to buy more guns.

Q: Really? And the people working for the faction accept this?

R: It’s not a question of accepting or not . . . That’s just the way it is.

T: The boss shows up and says ‘look, I’m going to be late with your salaries, because I am going to buy some pieces to beef us up’.

—T: Ex-*traficante*, 25 years old; R: Resident of *favela* dominated by the drug trade

It’s like this: sometimes they pay you well, sometimes the police invaded the boca and how are they going to pay you?

—*Traficante*, 19 years old, São Paulo

This suggests that changes in resources, at least in the short run, are unlikely to have a large effect on drug organizations’ firearms demand.

Conclusion

The overarching conclusion from the evidence I have gathered is that most aspects of firearms demand in peripheral areas are deeply affected by the nature of the criminal organizations—particularly the drug trade—that operate there. Where the structure is fragmented, with many small groups struggling against one another, the level of common street crime, theft, and aggression rises, while the ability and desire of criminal organizations to enforce local gun control are virtually nil. The result is that law-abiding citizens’ demand for firearms is likely to be higher. At the same time, because smaller organizations reap less profit, with higher vulnerability to police, the appeal of firearms ownership to youth considering life as a criminal may be lower. Finally,

such organizations themselves are unlikely to possess the financial resources to outfit themselves with anything more than cheap handguns.

As organizations expand and consolidate power, they begin to get more involved in the life of their community. This may involve mapping gun ownership, or even confiscating weapons from untrustworthy citizens. In cases where one organization controls an entire neighbourhood, the norm in Rio, but also observed in all three of the other cities visited, is that it enforces a strong form of gun control, in which the only viable route to gun ownership for most residents is by entering the organization. To have arrived at such a position of dominance, these organizations are likely to have acquired a large arsenal that includes automatic weapons, and their demand for such weapons will remain strong as long as they face the threat of police incursion or invasion by a rival syndicate. Future research should focus on the root causes behind the periods of stability and instability in syndicate relations, in particular the conditions that lead to invasion and the role of police action in (de-)stabilizing the balance of power between factions.

Although I have treated law-abiding citizens, marginal youth, and criminal organizations separately for analytical clarity, in the end the question of firearms demand in peripheral areas involves interactions among all three. No country of Brazil's level of economic development has such an unequal distribution of wealth, and peripheral areas are the physical manifestation of a social structure that excludes a huge portion of the population. Even when residents can find work, they occupy the bottom rung of a very steep economic ladder, enjoy very few public goods and services, and must face discrimination and sometimes humiliation by police. In many cases, they live under the dominion of illegal armed actors who impose their own rule of law at gunpoint. While this rough social order may actually dissuade law-abiding citizens from obtaining firearms, the presence of lucrative criminal organizations can be a major driver of demand among youth considering a life of crime. In this context, firearms offer not only a means of generating income, but also an assertive identity, a sensation of power, and status. Until base conditions truly improve, it is unlikely that firearms, and all that comes with their acquisition, will become less attractive to youth in Brazil's marginalized communities. ■

Endnotes

- 1 If we consider that the biggest reduction in firearm homicide occurred in the state of São Paulo—a 48 per cent decrease over the last five years (according to the Secretaria de Segurança Pública do Estado de São Paulo)—a third cause of reduction comes to the fore: effective police reform in the most populated Brazilian state. While this paper focuses on Rio de Janeiro, some comparative data from São Paulo is included in Chapter 3.
- 2 CNT/Sensus, national survey, November 2007.
- 3 Brazil is a federal republic with 26 states and a federal district (Brasília). Each state (and the federal capital) has two police corps: the civil police, which is an investigative police force, and the military police, a uniformed preventative police force.
- 4 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 5 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 6 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 7 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 8 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 9 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 10 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 11 Interview with Antônio Rangel Bandeira, Rio de Janeiro, 2005.
- 12 Interview with high ranking official of the Brazilian Ministry of Justice, 2005.
- 13 Interview with Ilona Szabo (coordinator of the campaign's logistics in Rio de Janeiro), Chris Magnavita (at the time, press officer of Viva Rio), and Jessica Galleria (former activist at Viva Rio and one of the organizers of the campaign 'Arma Não, Ela ou Eu', which targeted women), Rio de Janeiro, 2005.
- 14 Interview with Ilona Szabo (coordinator of the campaign's logistics in Rio de Janeiro), Chris Magnavita (at the time, press officer of Viva Rio), and Jessica Galleria (former activist at Viva Rio and one of the organizers of the campaign 'Arma Não, Ela ou Eu', which targeted women), Rio de Janeiro, 2005.
- 15 The software utilized was SPSS. Estimates are of minimum ordinary squares. Observations refer to monthly rates and the period referred to is displayed in each graph.
- 16 The significance level adopted is 10 per cent.
- 17 This procedure for model selection was used, given the lack of structure in a given underlying theoretical model of choice designed to explain armed violence. Rather, we preferred to let the data speak for itself, and in order to do that we relied on finding significant relationships of interest that could 'compete' to explain the observed variations in the variable of interest.

- 18 Although Brazil is not engaged in an official conflict as defined by the UN and in international policy, the term 'conflict' is used here in a more sociological sense, to describe the situation of armed violence in Rio.
- 19 Dowdney (2003) provides a definition of armed violence and characteristics of trafficking in *favelas* in Rio de Janeiro.
- 20 This study uses the notion of political as described by Misse (1997, p. 113, fn.): '... a determined legitimate "political order" that monopolizes the right to the use of force, to obtain an advantage in relation to "political order". Costs and political resources, as well as political goods and results, here, are not necessarily those accumulated in the legitimate sphere of the state, nor those inscribed in the "collective sense": they can be operated, accumulated and changed by individuals, groups, organizations, networks and markets, whether as means to other ends, or for their "own worth". They do not need to have "collective or social sense" nor universalist aspirations. Their operations, and their operators, can be simply "bad" (whatever meaning is attributed to this word) and in this way recognized by its agents and victims'.
- 21 Misse (1997, pp. 114–16) describes 'many different types of "political merchandises", and the so-called "economy of corruption", with its internal variety of types, is one of them. What is specific in corruption as a political merchandise is the fact that the political recourse used to produce it is expropriated from the state and privatized by the agent offering it. This privatization of public resources for individual ends can assume different forms, from the traffic of influence to the expropriation of recourses to violence, whose legitimate use depends on the monopolization of its legal use by the state'.
- 22 The majority of national-level data was gathered by Júlio César Purcena for the study 'The Brazilian Small Arms Industry: Legal Production and Trade', under the coordination of Pablo Dreyfus, 2004, published in Purcena (2005).
- 23 A larger Brazilian-made single-shot shotgun.
- 24 The exchange rate used was the average value of the US dollar between 1993 and 2003, using the value given by the Brazilian Central Bank in December for each of these years, or USD 1 = BRL 1.7896. This rate applies to the BRL figures given in Tables 2.5 and 2.6, which were used to calculate the total in Table 2.8.
- 25 The majority of these costs were in hospitalizations and emergency treatment of intentional violence; see Fernandes et al. (2006).
- 26 The figures presented here include only *autos de resistência*, or 'justifiable police homicides'—i.e. cases where officers have reported killing civilians in self-defence. Undeclared or misclassified civilian deaths (as, for example, 'killed by enemy gunfire') are not included.
- 27 In 1997 Rio state police killed 300 civilians; in that same year, all US police combined killed 361 civilians.
- 28 Population data from Instituto Brasileiro de Geografia e Estatística. The rate for 2003 was around 20 per 100,000 residents.
- 29 *New York Times* (2004). In terms of absolute numbers, the average yearly total of civilians killed by police in the entire United States is 373, about a third of the average for Rio state over the last three years. The US rate per 100,000 residents is 0.2, less than one thirtieth that of Rio state, according to Department of Justice, Bureau of Justice Statistics (2001). Per 100,000 figures are derived from published figures, expressed in per 1,000,000 terms. US statistics use only the over-13 population to calculate rate; if this methodology were applied to Rio figures, they would be even higher.
- 30 In 1996, during the Marcello Alencar government in Rio de Janeiro, police who wounded, shot, and killed most often were rewarded.
- 31 If we look more carefully at the characteristics of these weapons, they all have great shooting power, with high volume of shots fired at once, usually measured in rounds per minute (for machine guns, sub-machine guns, and assault rifles); see Hogg and Adam (1996).
- 32 As Boltanski and Chiapello (2002, p. 166) argue, '[t]hose who do not have a project, stop exploring networks and find themselves threatened with exclusion, that is, with the death in fact of a reticulated universe. They run the risk of not being able to reinsert themselves in the projects, and thus, cease to exist'.
- 33 Small arms held by the state (private and public security forces) were also considered, since many of the weapons held by criminals could have been diverted or stolen from these groups.
- 34 Some of the site consulted were <<http://www.colt.com/colt>>; <<http://www.ruger-firearms.com/>>; <<http://www.beretta.com/>>; <<http://www.browning.com/>>; <<http://www.fullaventura.com.ar/>>; <<http://www.smith-wesson.com/contentbuilder/layout.php3?contentPath=content/00/01/32/01/03/userdirectory33.content&>>; <<http://www.egoibarra.com/Eibar/Armagentza>>; <<http://www.vr-waffen.de/Museum/museum.html>>; <<http://www.ifrance.com/littlegun/arme%20belge/aa%20image%20armes%20belge.htm>>; <<http://world.guns.ru/>>; <<http://www.myafib.com.ar/>>; <<http://www.cdi.org/adm/AS.html>>; <http://www.davidsonsinc.com/consumers/subsites/inven_search.asp?dealer_id=532910>; <<http://www.gzanders.com/dhomepage.html>>; <<http://www.bsporting.com/>>; <http://www.gunfinder.net/getprice/index_handguns.shtml>, etc.
- 35 In Rio, the term *favela* refers unambiguously to a peripheral area, even when the neighbourhood in question is not a 'typical' *favela* (built by squatters on hillsides). However, in São Paulo, the term *periferia* (periphery) is more commonly used, and *favela* has a far more specific meaning. Other usages were encountered in Recife and Porto Alegre as well. To avoid confusion, I use the term 'peripheral areas' to refer to any low-income, informally urbanized area, although when discussing Rio in particular I use the term *favela* as well.
- 36 This term clearly dates back to a time when peripheral areas were mostly unpaved shanty towns. Over time, these areas have grown, and private and public urbanization efforts have brought about a fair degree of urbanization, including in many cases paved roads, public transportation, integration into power and water networks, and other public services.

Still, in most cases, peripheral areas remain clearly delineated as such to both residents and public officials.

37 In English, 'faction' suggests dissenting members of some larger organization, and is misleading, given that these drug operations are autonomous arch rivals. A further complication is that in the other cities I studied, drug organizations were found to exist and in some cases had grown to considerable size and organizational complexity, though never achieving the level seen in Rio. To avoid confusion, I refer to drug syndicates or drug firms generically; when referring specifically to Rio's syndicates, I use the term '*comando*', taken from the names of the two largest and longest-lived syndicates, the Comando Vermelho and the Terceiro Comando.

38 See previous note.

39 Drug dealers or traffickers, but also anyone employed by the drug trade, including lookouts. In this study, we have maintained many terms in Portuguese related to the drug trade, providing translations in footnotes, to retain nuances such as this.

40 Local drug boss.

41 'Soldier. Ranked position within a drug faction at the *favela* level responsible for armed security of faction territory and invading rival territory' (Dowdney, 2003, p. 259).

42 Personal bodyguard of the *dono*.

43 Literally 'balls': large parties held within *favelas*, sometimes sponsored by *donos*.

44 'Manager responsible for all drug faction armed security within a *favela* community, including the management of faction soldiers (*soldados*)' (Dowdney, 2003, p. 258).

45 Focus group interview conducted by Jessica Galeria and Tatiana Moura in January 2004.

46 The possible exception was a community in Recife dominated by an ex-convict who, at the behest of residents, killed or expelled the gangs operating there, and, according to his son, does not allow criminals of any kind to operate out of 'his' territory. This may be an example of a more general phenomenon, not explicitly studied here, of vigilante and paramilitary groups taking over peripheral areas and charging residents a tax to 'keep criminals out'. Recently, dozens of *favelas* in Rio have come under the control of such groups. Since virtually no field research has been done in these communities, I have not attempted to analyse firearms demand in such circumstances.

47 The following paragraph draws on Misse (1997; 2003) and Dowdney (2003).

48 This word refers both to the local drug operation qua corporation (as used here) and to the physical point of sale of illicit drugs (as in 'the *boca* is in that building over there'). Frequently, these senses overlap (as in 'let's take over his *boca*').

49 At the time of this interview, the official minimum monthly salary was BRL 200 (USD 80). Soldiers were thus paid a fixed salary of four to eight times the official Brazilian minimum wage.

50 From the source interviews recorded by Dowdney (2003). This interviewee is identified as 'Informant 1' in Dowdney (2003).

51 In English in the original.

52 The documentary film *News from a Personal War* (1999) captures this unique quality of the conflict in Rio.

53 A *matador*, or 'killer', is a armed vigilante who, usually at the behest of local shop owners or residents, 'cleans up the town' by expelling or killing criminals in the area and preventing new ones from entering. Presumably not involved in criminal activity himself (other than armed violence), the *matador* nonetheless is likely to wield power over residents, which he may use to extort a salary or favours. In some cases, residents voluntarily pay for his services. The film *Man of the Year* (2003) presents a fictional account of a *matador* in the suburbs of Rio de Janeiro.

54 Incentives that may be legitimate (make a big splash in the media for arresting a major *traficante*) or corrupt (resell the seized weaponry for a large profit).

55 That is, the FAL assault rifle mentioned in an earlier quote from the same resident.

56 Of course, cracking down on contraband in illegal weapons is also crucial. However, the widespread presence of illicit automatic weapons strongly suggests that it would be an error to rely entirely on a supply-side strategy.

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