

The Great São Paulo Homicide Drop

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Abstract

The homicide rates in the city and state of São Paulo were cut in half in the years from 2001 to 2007 (SESP, 2008). The decline in the city of São Paulo was especially striking and parallels the decline in New York City in the 1990s. It can be confirmed with a number of independent data sources, and was significantly larger than in other Brazilian cities. The decline may be attributed to more effective policing methods including the better enforcement of strict gun control legislation. It demonstrates that effective measures can be taken to reduce lethal crime in a developing country without waiting to solve underlying socioeconomic problems.

With an estimated population of 11,000,000 within the city limits, and with approximately 20,300,000 in the metropolitan area (IBGE, 2007), the greater São Paulo metropolitan area is by one estimate the seventh largest urban agglomeration in the world (Brinkhoff, 2006). The metropolitan area dominates the state of São Paulo with an estimated population of 41,000,000, about the size of Argentina. The remarkable homicide drop in Sao Paulo in the first years of this century is as striking and important as the much better known homicide drop in New York City in the 1990s, but it has not been as extensively reported or analyzed.

Before the recent homicide drop, Brazil's high homicide rates were frequently attributed to the country's high levels of poverty and inequality. In a recent book, historian Luís Mir (2004) insisted that Brazil was in a state of civil war and characterized São Paulo and Rio de Janeiro as *metropolises of death*. Mir insisted that "nothing can be done about the problem until the majority and the minority sit down and discuss the slices of the pie" that each social class receives (Geração Online, 2004). But his book was published three years after the homicide rates had begun a sharp decline despite the fact that no such radical re-slicing of the socioeconomic pie had taken place. This parallels the experience of leading American criminologists James Q. Wilson (1995) and John DiIulio (1996) who published works in the early 1990s predicting massive increases in crime rates after the rates had already begun a precipitous decline.

These analysts erred by attributing cyclical peaks in crime waves to persistent social and economic problems, and by underestimating the extent to which violent crime has its own dynamics and can be treated as a separate problem. When crime waves get

out of hand the public demands action, political leaders allocate more resources, and the criminal justice system does its best to respond. In both Brazil and the United States, many police authorities took effective action to reduce violent crime without waiting for underlying social problems to be resolved. This was also true in Colombia where homicide declined 15% in the three years from 2003 to 2006 (Casa de Nariño, 2006). By contrast, homicide rates in Venezuela increased 67% from 1999 to 2005 (Romero, 2006) despite a booming economy and a populist government that strove to redistribute wealth to the poor.

Research on socioeconomic factors in crime in Brazil has found complex and varied patterns not easily reduced to generalities about inequality and oppression (Andrade and Lisboa, 2000; Mendonça et al, 2003; Drummond, 2002; Cerqueira and Lobão, 2003a; Cerqueira and Lobão, 2003b; World Bank, 2006). Homicide rates are not always highest in the poorest neighborhoods or at the times of highest unemployment. Young men with low incomes are the most frequent victims as well as perpetrators of violent crime. Most homicides do not involve individuals of markedly different social standing.

Studies by Coelho (1988) and Paixão (1988) in the state of Minas Gerais found that socioeconomic factors were less important than the efficiency of the criminal justice system in explaining variations in homicide rates. In a cross-sectional study in metropolitan São Paulo, using data from 1970 to 1984, Pezzin (1986) found that poverty, unemployment and urban density correlated with property crimes but not with crimes against persons. Saporì and Wanderly (2001) tried to establish a relationship between unemployment and homicide rates in Rio de Janeiro, São Paulo, Belo Horizonte and

Porto Alegre but were unable to establish robust results. A number of more complex econometric models have offered contradictory findings (Crequeira and Lobão, 2003a).

A study of homicides by census tract in the city of São Paulo from 2000 to 2003 (Kilsztajn, et al. 2005) found that, although most of the victims were men with low incomes, poverty did not explain the variation in homicide rates between neighborhoods. There were poor census tracts with high homicide rates and poor census tracts with low homicide rates. The critical difference seemed to be the presence of organized drug trafficking, although the data on drug trafficking patterns are less reliable. Similar conclusions were reached by Beato Filho et al (2001: 1170) in Belo Horizonte and by Baierl (2004: 145) in the city of Santo André in the industrial suburbs of São Paulo.

This paper examines trends in homicide and related crimes in the city and state of São Paulo, Brazil's largest population center, and puts these trends in the context of trends elsewhere in Brazil. It draws on data from a number of different sources that offer insight into the causal factors involved. Finally, it places São Paulo in the context of the emerging literature on crime declines around the world (Zimring, 2007).

Trends in Homicide and in São Paulo. Chart One shows the homicide rate in the city of São Paulo for the years from 1980 to the first half of 2008, a period long enough to show a full historical cycle. These rates are drawn from two different sources. The first source, from health department records, includes all homicides, including negligent homicides and homicides committed during armed robberies. The second source, from police records, includes only criminal homicides. Since criminal homicides are more frequent, especially in peak crime years, this makes only a modest difference as can be seen for the two years when the two series overlap.

The chart shows a steady increase from 1980 to 2000, then a turning point and a sharp decline. In 2001, there were 5162 criminal homicides in the city of São Paulo. In 2007, there were only 1527, despite an approximately 400,000 increase in the city's population. Monthly homicide statistics from the Secretaria de Estado de Segurança Pública (unpublished) for the city of São Paulo show a steady decline for the entire period from January 2001 through June 2008. There were 477 criminal homicides in January of 2001 and only 97 in January of 2008. January is mid-summer in São Paulo, a time when homicide and other crime rates tend to peak.

Most Brazilian statistical data are reported by state, and these data provide more details on homicide trends. Chart Two compares trends in criminal homicide, attempted homicide and negligent homicide in the state of São Paulo. The sharpest decline is in criminal homicide. The rate for negligent homicide (96% of which are automobile accidents) did not show a parallel decline; the decline was in willful, intentional murder and attempted murder.

Comparative data for Brazil as a whole and for other jurisdictions in Brazil are of uneven quality and not always as up-to-date as the São Paulo data. But the available data do not show a Brazil-wide crime decline, at least before 2005. Data from the national criminal justice statistical service, in Chart Three, show a stable criminal homicide rate for Brazil as a whole from 2001 to 2005 (SENASP: 2005, 2006). During this period, the rate declined only slightly in Rio de Janeiro, Brazil's other huge urban agglomeration. The fact that São Paulo trends differ from those elsewhere in Brazil suggests that policies implemented on the state level are likely to have been responsible.

At 14 per 100,000 in 2007, the criminal homicide rate in São Paulo has not yet quite declined to the levels achieved by New York City (7 in 2004). But it compares very favorably with the rates reported by Detroit (42), Baltimore (44) and Washington, D.C. (36) in the same year (Statistical Abstract, 2007). The American statistics are for “murder and non-negligent manslaughter,” a category that is approximately comparable to “criminal homicide” (*homicídio doloso*) in Brazil.

Disaggregating São Paulo Homicide Patterns. Using data for the city of São Paulo in 2001, Gawryszewski, Kahn and Jorge (2004), found a remarkably strong gender difference, with a homicide rate of 111.1 per 100,000 for men and only 7.4 for women. The highest death rate was for 19 year old men. Fifty-six percent of homicide victims were between 15 and 29 years of age. They found that firearms accounted for 66.5% of the deaths as recorded on death certificates, and 88.6% of deaths recorded on autopsy reports which are considered more reliable. The average number of bullet wounds per victim was 6.9, with the largest number of wounds in the head. A more recent study by the Secretaria de Estado de Segurança Pública (unpublished), using a sample from 2005 data, found the average number of gunshot wounds to be 4.5. Most of the victims in the 2001 study, 66.0%, were transported to a hospital, although not all received medical assistance. Among those victims whose blood was tested, a little more than half, 55.8%, were negative for alcohol. Very few, less than 1%, tested positive for cocaine. These figures are likely to be high, since the police request blood tests when they have reason to suspect alcohol or drugs are involved. They also found that the largest number of homicides occurs on the weekend, with the peak on Saturday and the lowest number on Wednesday.

Kahn (2004) observed an annual cyclical pattern in homicides and attempted homicides in the state of São Paulo, peaking in the first trimester of the year which is summer in the southern hemisphere. Ceccato (2005) found that most homicides in the city of São Paulo took place on the evenings and weekends during the hotter part of the year and in low income neighborhoods. She observed that the significant reduction in homicides in recent years was not always accompanied by a similar reduction in other violent crime, and suggested that effective gun control measures were a significant causal factor.

Examining trends from 2000 to 2003, Kahn (2004) found that most of the reduction in homicides was in the larger cities of the state, including the capital itself, where the homicide rates are highest. Within the capital city, the homicide decline could be observed in 75 of the 93 neighborhoods; it was not concentrated in any geographic region. The reduction was observed both in homicides in public places and in homicides within homes and commercial establishments.

Policing and Homicide Rates. The impact of policing efforts on crime rates remains controversial and difficult to measure. In the 1970s, the consensus among criminal justice researchers in the United States was that “nothing works” (Martinson, 1974; Kelling, et al, 1974). This remained the consensus opinion until the 1990s when trends shifted and suddenly researchers began to find that “everything works” (Zimring 2007: 25-42). In periods of declining crime rates the pendulum may swing from excessive pessimism to excessive optimism.

A more encouraging reading of the United States experience is that the police, especially in New York City, learned from the failure of routine patrolling and other

traditional activities and adopted more effective tactics in the 1990s. In the most thorough evaluation of the New York City experience, Zimring (2007: 151) concludes that: “there is powerful circumstantial evidence that compound major changes in the quantity of police and the tactics of policing had a major impact on crime.”

The police in São Paulo responded to the rising crime rates in the 1990s with changes in management culture similar to those instituted in New York City in the 1990s. They gave new priority to gathering accurate and timely empirical data and using it to plan and evaluate programs. An intergovernmental communications network was established to link the military and civil police. Crimes were entered into a geographic information system, and saturation units were sent to areas controlled by drug traffickers. A data base was established with photographs of over 300,000 criminals. Telephone switchboards were set up to receive citizen complaints of incidents, and a web site was opened to take reports of thefts of vehicles, documents and cellular telephones. Community policing stations were opened, and a homicide combat unit was organized with an emphasis on solving difficult cases. A specialized unit was organized to provide supportive assistance to women who were victims of sexual crimes. Sophisticated computer software linked information from police reports with bank records, telephone records and probable areas of residence. And the police began more aggressive efforts to remove illegal firearms from the streets.

As a consequence of these efforts, the number of imprisonments in the state of São Paulo increased from 18,602 in the first quarter of 1996 to 30,831 in the first quarter of 2001, after which it settled back to approximately 23,000 a month, as shown in Chart

Four. The turning point in the state's criminal homicide rate came at the peak of this increase in imprisonments, as shown in Chart Five.

Data on other crimes are not as good as the data on homicides, making it difficult to determine whether the improvements in policing caused a generalized decline in crime. Reported kidnappings shot up from 12 in 1996 to 307 in 2001, settling back to 123 in 2006. The very low number of reported kidnappings in 1996 suggests that most victims chose not to report the crime to the police, since kidnapping was widely believed to be high during this period. The dramatic increase in reports may reflect confidence in the ability of special anti-kidnapping units to solve kidnappings. There was a spurt in reports of carjacking in the second two quarters of 2002 which may reflect increased belief in the ability of the police to recover stolen automobiles. The reports of carjacking declined after that.

Arrests for drug use and drug trafficking have grown steadily in São Paulo since 2001. These arrests have contributed to prison overcrowding, increasing the pool of young men available for recruitment into organized crime. In future, São Paulo authorities hope to rely more on treatment than on imprisonment for drug offenses.

Poverty and inequality may play a larger role in theft and robbery than they do in homicide, and these crimes have not declined in step with the decline in homicide. Most criminal homicides involve conflicts between young men, often under the influence of alcohol or drugs. Several São Paulo municipalities have closed bars early as a measure to reduce violent conflict. Removing guns from the population seems to be highly effective.

Gun Control and the Homicide Drop. According to data from the Ministry of Health, the principal cause of death from external causes in Brazil is “aggressions” for

men and transportation accidents for women. Death from aggressions is 12 times more frequent for men than for women. Among men, 72% of aggressive deaths are caused by firearms, as compared to 54% for women. In 2003, 33,991 Brazilian men and 3,937 women were killed by firearms (Saúde Brasil, 2005). In 2002, there were 21.7 firearms deaths for each 100,000 people, as compared to 10.7 in the United States (Souza, et al., 2007: 575).

In October, 2003, the Brazilian federal government enacted a new set of laws to limit the importation of firearms, make it illegal to own unregistered guns or to carry guns on the street, and increasing the penalties for violation of gun control laws. In 2005, Brazil's leading political parties and advocacy groups promoted a national referendum to ban commerce in arms and ammunition altogether. Despite support from all sides of the political spectrum, this referendum was defeated by a hastily organized pro-gun coalition that argued that gun control would only deny guns to law abiding citizens, making them sitting ducks for criminals.

Despite the failure of the referendum, Brazilian gun control legislation is strong and some analysts (Souza, et al, 2007) attribute the recent drop in homicide deaths to the 2003 legislation. Data from the Ministry of Health shows that "firearms deaths" in Brazil increased steadily from 1992 to 2003, then turned down significantly (Painel de Indicadores, 2006, p. 42). The Ministry of Health data include all categories of gun deaths, including accidental deaths.

Unfortunately, there is a problem with the health department data on firearms deaths, at least for some years in the state of São Paulo. Many physicians apparently recorded firearms deaths as caused by an *objeto contundente*, an unfortunate translation

of the World Health Organization category of death by a “blunt object.” A bullet can be thought of as an *objeto contundente* in Portuguese but not as a “blunt object” in English. This confusion was apparently cleared up after 1999, at which time the number homicides recorded as caused by an *objeto contundente* declined very sharply. Because of this problem, we have combined firearms deaths and “blunt object” deaths in Chart Six.

The most consistent data in Chart Six are those for deaths by knives and sharp objects. Deaths by gunshot and “blunt objects” (many of which were bullets) peaked in 2001 and then declined significantly. The unfortunately high percentage of “not specified” deaths further clouds the value of this data series. The fact that deaths by knives and sharp objects are constant while other deaths have declined gives some support to the thesis that firearm control has been an important factor.

The data from the federal Ministry of Health also show great variation from state to state which also may reflect problems in reporting. Comparing 2003 to 2004, reported firearms deaths declined 19% in the state of São Paulo, 9.9% in the state of Rio de Janeiro, 14.5% in Pernambuco, and 20.6% in Matto Grosso. But they increased by 7.2% in Minas Gerais, 29.3% in Amazonas, and 11.4% in Pará (Evolução da Mortalidade, 2007). The reported improvement in the statistics for Brazil as a whole can be largely accounted for by a very sharp drop in São Paulo which accounts for about 25% of the reported national firearm deaths. The most important factor does not seem to be the passing of national legislation, but the vigor with which the legislation is enforced on the state level.

In the state of São Paulo, firearms confiscations by the police rose from 6,539 in the first quarter of 1996 to 11,670 in the second quarter of 1999. This peak coincides with the beginning of the great São Paulo homicide drop. Firearms confiscations remained high through 2004, and then settled back to their previous level (Chart Seven). São Paulo authorities believe that the decline in firearms confiscations after 2004 was because the new national legislation had increased the penalties for carrying firearms and fewer persons risked carrying them on the street.

The São Paulo Homicide Drop in Comparative Perspective. The dramatic drop in the São Paulo murder rate conflicts with media imagery. News coverage has dramatized brazen attacks by organized criminals on police stations and public transportation in the city of São Paulo as well as in Rio de Janeiro and other Brazilian cities. These attacks paralyze a city for a day or two and contribute to Brazil's image as a dangerous place that many fear to visit. They are intended to generate media coverage, embarrass officials and intimidate law enforcement. They disrupt the life of the community and threaten the forces of law and order. But the number of people killed in these attacks is small compared to the monthly toll of mundane homicides that do not receive so much media attention.

The attacks by organized crime are a response to police crackdowns that have put large numbers of offenders in crowded prisons and removed thousands of handguns from circulation. These police measures have substantially lowered homicide and some other violent crime rates. This does not generate dramatic news stories or television footage, but it does make life much safer for the average citizen or visitor to São Paulo.

Most research on crime drops has focused on the United States (Blumstein and Wallman 2006; Zimring 2007), examining trends over time and differences between states and cities. Despite the plethora of research, the causal factors remain controversial. In the most comprehensive review of this research, Zimring (2007) argued that data from one country do not provide sufficient variation in many variables to adequately test causal models. He added Canada as a comparison case, and found that Canadian crime trends were remarkably similar to those in the United States although the trends in many of the hypothesized causal factors were quite different.

Zimring and others have found that the 1990s crime decline was much sharper in the city of New York than elsewhere in the United States. This fact is often attributed to effective policing measures, including anti-gun measures, instituted by the New York City police (Karmen, 2000). In the Brazilian case, the most relevant differences in crime policies are between states, and these have made a tremendous difference in homicide rates. The modernization of the police forces in the state of São Paulo has been highly effective, and has had a major impact on the national statistics, just as the success in New York City has been a major contributor to national statistics in the United States.

The Brazilian constitution has no provision guaranteeing the right to bear arms, and Brazil was able to implement strong national gun control legislation in 2003, something which has not been possible in the United States. The results suggest that the legislation was helpful in reducing homicide, but only when actively enforced by the police forces in a state. This is not primarily because professional criminals and drug gangs were disarmed; it is largely due to a sharp decline in homicides resulting from altercations between young male acquaintances.

One controversial hypothesis in the United States has no application to Brazil. There was no change in abortion policies or practices in Brazil a generation before the São Paulo homicide decline, so there is no possibility that the Brazilian crime drop was due to an increase in abortion. This, combined with Zimring's finding of a lack of age-related homicide declines correlated with abortion legalization in several European countries, suggests that any correlation between changes in abortion policies and declining homicide rates a generation later in the United States may have been a coincidence.

Drug use, on the other hand, is a problem in Brazil as it is in the United States. It may be that the homicide explosion came later in Brazil than it did in the United States because the crack cocaine epidemic came later. Confiscations of cocaine and crack have continued to increase in São Paulo over the last five years, but it is not certain whether this is due to more effective policing or to an increase in the amounts being sold.

Zimring (2007: 197) concludes his review of the crime decline in the United States with the statement that "the crime decline of the 1990s was a classic example of multiple causation, with none of the many contributing causes playing a dominant role." Similarly, Morrison and Bronkhorst (2006: 9) conclude that "there is no single solution to reduce levels of crime and violence in Brazil." Success has many fathers, and there is enough good news in the São Paulo homicide decline to credit many of them. Most importantly, the great São Paulo homicide drop shows that effective measures can be taken to reduce lethal crime without waiting to solve underlying socioeconomic problems.

Chart One

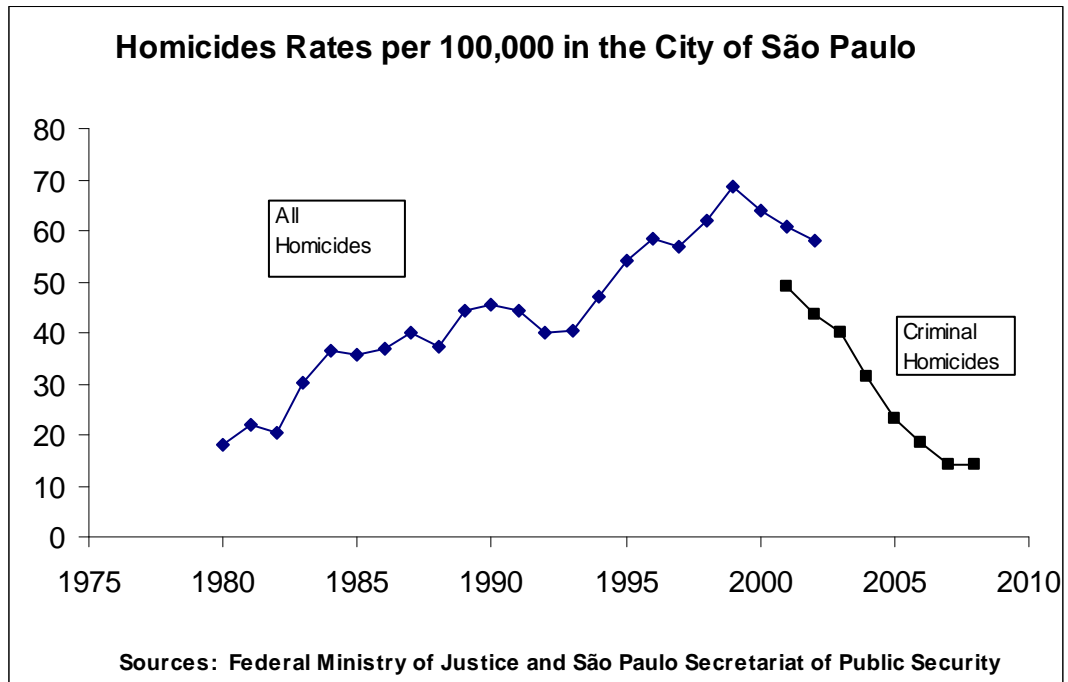


Chart Two

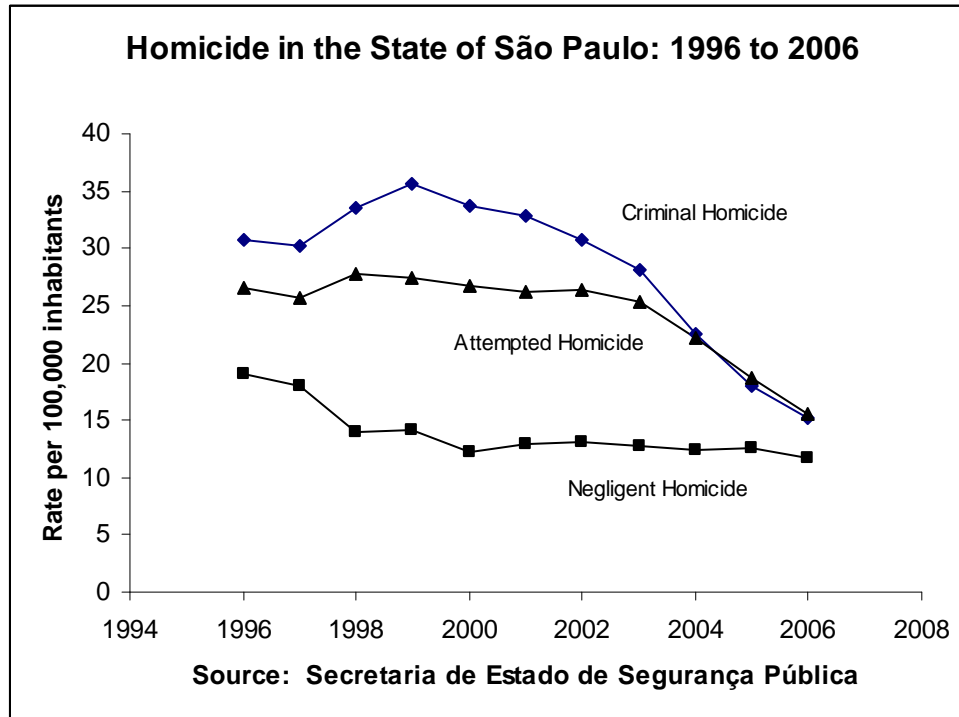


Chart Three

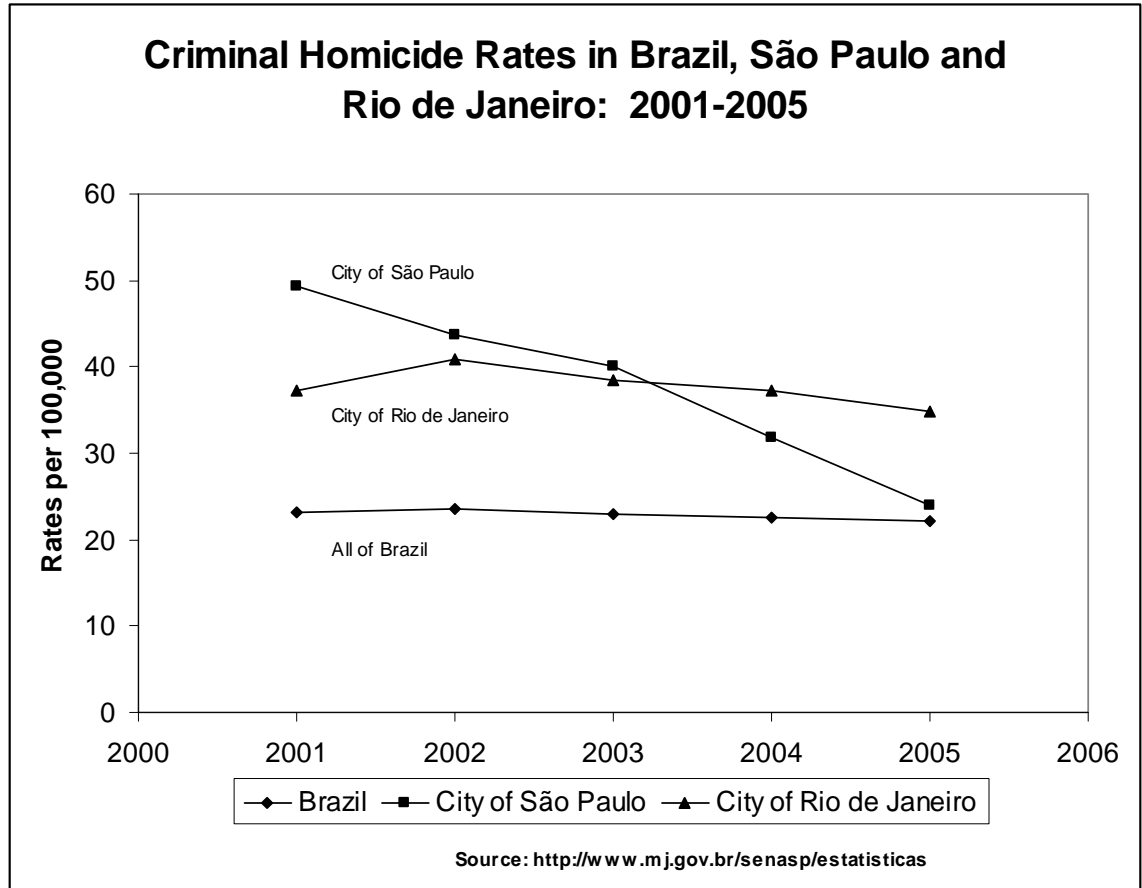


Chart Four

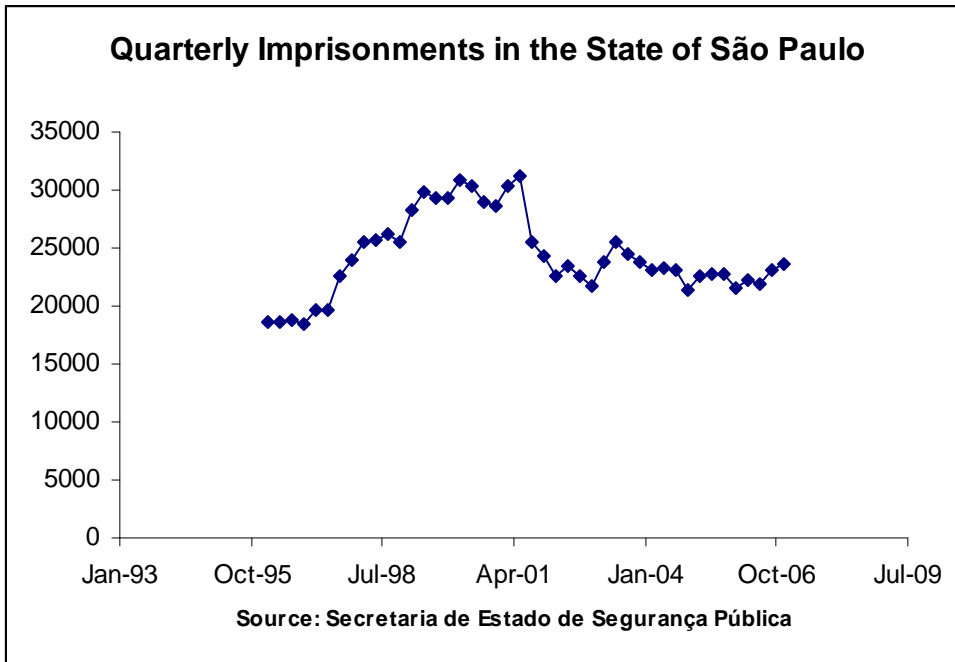


Chart Five

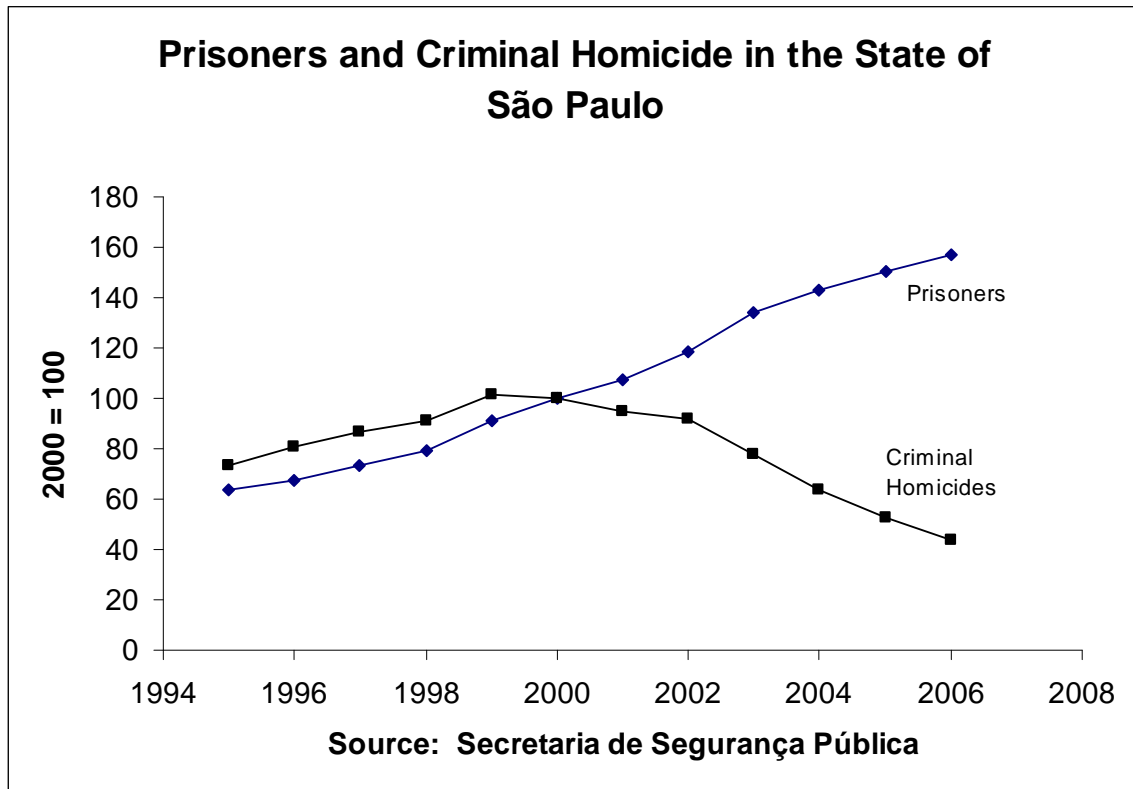


Chart Six

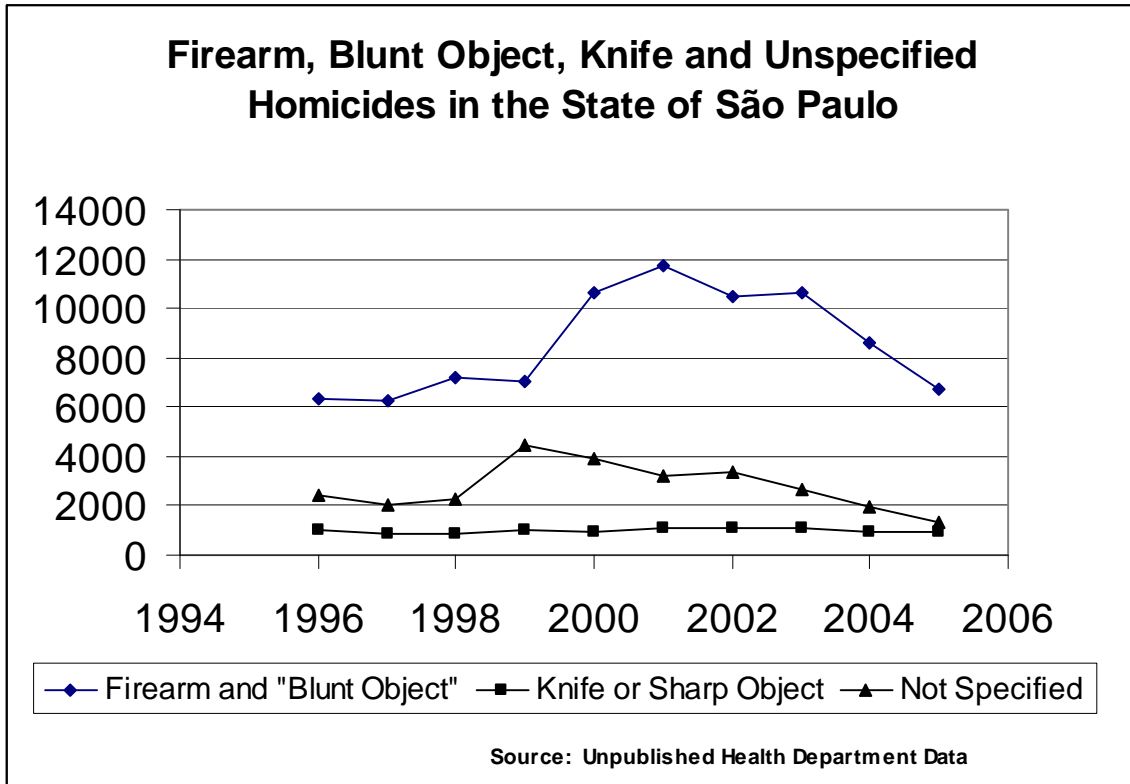
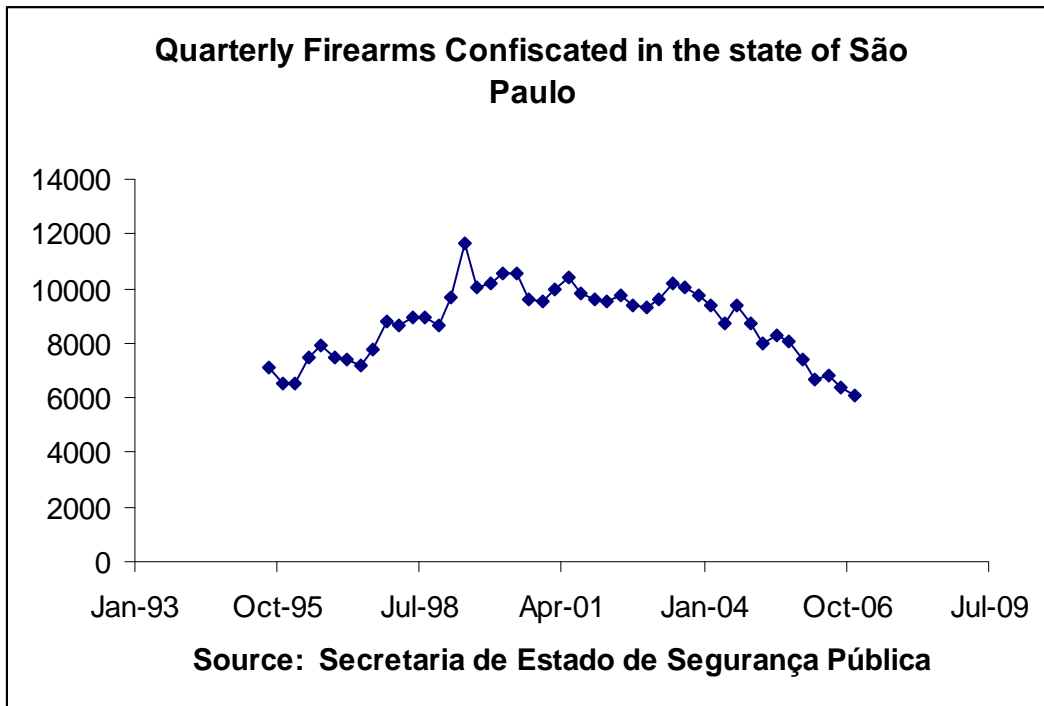


Chart Seven



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