Crime in Argentina: A Preliminary Assessment

Daniel Lederman¹ LCSPR, The World Bank December 7, 1999

I. Introduction: The Rising Tide of Crime and Violence

Comparable historical statistics of homicide rates show that Argentina has been and to a large extent still is a relatively peaceful society. Based on data from public health reports published by the World Health Organization (WHO), Figures 1 and 2 compare the evolution of homicide rates in Argentina with those of its Mercosur neighbors and other selected countries during 1979-1993.² It is clear from this evidence that over this extended period of time Argentina had homicide rates clearly below those of Brazil, Mexico and even the United States.

Nevertheless, in the second half of the 1990s, official crime statistics from Argentine sources show a significant rise, especially since 1994. Figure 3 shows the overall crime rate for 1992-1997 and the corresponding percent increase (in bars), based on data reported by the federal and provincial police forces to the Ministry of Justice. A similar upward pattern is reflected in the evolution of the police-reported homicide rates, as shown in Figure 4. Indeed, it is very likely that the "true" homicide rate in Argentina is higher than 10 (per 100,000 people), because, as noted in Figure 4, the data for 1996 and 1997 do not include data from two high-crime provinces (Salta and Jujuy).³ And, as shown in Figure 5, these two provinces had some of the highest crime rates in the country in 1995.

A major caveat of the evidence presented so far is that official crime statistics are renown for suffering from severe under-reporting by victims and under-recording by the authorities. Usually, homicide statistics are more reliable than those of other lesser crimes because corpses are harder to ignore than lost or damaged property, for instance. Yet even then, the extent of under-reporting and under-recording in all crime statistics will depend on various factors, including the level of education of the population and the citizens' confidence in the public security forces, as well as on the integrity of the crime recording systems. Hence, the fact that even official statistics in Argentina show a worrisome upward trend should be a strong signal that something must be done to stop it, before the economic and welfare costs associated with rising crime and violence escalate to daunting levels. Also, as will be discussed further below, there is strong empirical

¹ The opinions expressed in this note are those of the author and may not represent the official views of the World Bank. I gratefully acknowledge the invaluable suggestions provided by Professor Jeffrey Grogger of the University of California at Los Angeles.

² These data come from information on the causes of deaths, usually reported by coroners' services of the public health system. In this case, we use the number of deaths "due to injuries purposefully inflicted by another person."

³ All official data discussed here comes from INDEC, <u>Anuario Estadístico de la República Argentina</u>, various issues. This source does not provide data on crimes for Salta during 1996 and 1997, nor for Jujuy in 1997.

evidence indicating that changes in crime rates tend to persist over time, thus making it difficult to reverse crime waves.

Given the aforementioned trends in crime and violence in Argentina, it is not a surprise that recent opinion polls indicate that these issues are atop of the population's public policy concerns. A recent poll of attitudes and perceptions among the residents of the City of Buenos Aires, for example, indicate that over 90% of respondents believed that crimes had been rising between 1996 and 1998. About the same percentage of respondents believe that "violent situations" rose during that two year period. Moreover, 28.1% of respondents (in October 1998) claim to have been the victim of some crime during the last year in their own neighborhoods; 21.0% in other parts of the city. In the same poll, the top three perceived causes of the rise in crime are, in order of importance, the worsening economic situation, increased use of illicit drugs by youth, and deficiencies in police services. Finally, the same poll shows that, depending on the question asked, only between 34% and 50% of crimes are actually reported to the authorities.⁴

II. Potential Economic and Welfare Costs

Without really knowing the exact magnitude of the problem in Argentina -- due to the lack of reliable statistics -- it is obviously difficult to assess the economic and welfare costs of the rising tide of crime and violence. Nevertheless, we are confident that they can be quite large.

A common way of looking at the costs of crime is to add-up the related expenditures in preventive and medical services, plus the lost economic production due to the associated losses in productive resources, including the loss of human lives. These costs can easily add-up to exorbitant numbers. For example, if we assume that victims of homicides had an earning potential equal to the annual GDP per capita (i.e., the average income of the population), with a life expectancy of an additional 25 years (victims actually tend to be young (57% of homicide victims in 1990-93 were aged 10-49), then the economic costs of the homicides officially recorded in 1997 approaches \$28 billion dollars for that year alone, and close to \$720 billion in the following 25 years. And this is the cost for the homicides recorded by the authorities in 1997 only.

It should also be recognized that the high levels of crime seen in other countries of Latin America are a deterrent to investment and thus have become a serious obstacle to economic development. The silver lining of the Argentine situation is that, as far as we can tell from the official statistics, the situation is not yet as dire as in other Latin American countries, such as Brazil and Mexico. But this situation could worsen rapidly if prompt action is not taken. Therefore, it is imperative that the rising problem of crime and violence be dealt with sooner rather than later.

III. International Empirical Evidence on the Causes of Crime

⁴ For the poll results, see Enrique Zuleta Puceiro, <u>Percepciones y actitudes acerca de la inseguridad</u> <u>ciudadana en la Ciudad de Buenos Aires: Síntesis Informativa</u> (SOFRES-IBOPE: Buenos Aires, December 1998).

In a recent study of empirical determinants of the causes of national homicide rates, Fajnzylber et al (1998) found that the following factors seem to be key "causes" of violent crime rates:

- Income inequality
- Poor economic performance (i.e., low growth rates of GDP)
- Low and ineffective police presence (i.e., the number of police per capita)
- Drug-related illicit activites

Perhaps, more importantly, this World Bank-sponsored research found that there is a significant degree of "criminal inertia." That is, changes in national crime rates tend to persist over time, even after the original causes of the change have disappeared. This finding highlights the important of dealing with emerging crime waves at an early stage in order to prevent the maintenance of excessively high crime and violence over time.⁵

In subsequent studies, Fanzylber et al (1999) and Lederman et al. (1999) confirmed that inequality is an important determinant of national homicide rates even after controlling for the effects of the distribution of education, poverty, ethnic and economic "polarization," other measures of the quality and quantity of public security services, and various measures of social capital, such as the level of trust among members of society.⁶

Yet it is likely that many countries, provinces and cities have idiosyncratic causes of crime and violence. Due to the fact that very little diagnostic analysis has been applied to the case of Argentina in particular, we are unable at this time to provide an informed assessment of the forces that are driving the current crime wave. For the time being we can only provide some preliminary hypotheses.

IV. Possible Idiosyncrasies of the Argentine Situation

In the first place, evidence from opinion polls and measures of the quality of public institutions in Argentina indicate that one strong possibility is that institutional weaknesses are part of the problem. Second, it is likely that the recent dramatic swings in the Argentine business cycle and rising unemployment, combined with some deterioration in the distribution of income, have all been contributing factors to the rise of criminal behavior.⁷ But we cannot overemphasize that these arguments remain working hypotheses in the case of Argentina, because no rigorous analysis of the cause of crime and violence in Argentina has been conducted. In part this is due to the lack of credible unofficial statistics. In addition, official data shown in Figure 6 shows that the ratio of

⁶ Pablo Fajnzylber, Daniel Lederman, and Norman Loayza, "Inequality and Violent Crime," Mimeographed, Office of the Chief Economist for Latin America and the Caribbean, The World Bank,

America and the Caribbean, The World Bank, Washington, DC, August 1999.

⁵ See Pablo Fajnzylber, Daniel Lederman, and Norman Loayza, <u>The Determinants of Crime Rates in Latin</u> <u>America and the World: An Empirical Assessment</u> (Washington, DC: The World Bank, 1998).

Washington, DC, October 1999. Also see Daniel Lederman, Ana María Menéndez, and Norman Loayza, "Violent Crime: Does Social Capital Matter?" Mimeographed, Office of the Chief Economist for Latin

⁷ See discussion presented above on recent public opinion polls. For a discussion of measures of the quality of public institutions in Latin America, see Javed S. Burki and Guillermo Perry, <u>Beyond the Washington</u> <u>Consensus: Institutions Matter</u> (Washington, DC: The World Bank, 1998).

total convictions (*sentencias condenatorias*) to the total number of recorded crimes has been below 5% and declining in the last six years. This indicator can be interpreted as a measure of the perceived probability of being caught and sentenced after committing a crime. It is clear that this type of performance by the police and judicial system does not reflect an effective crime-deterring behavior.⁸ It is worthwhile to note that these conviction rates tend to be quite low for international standards. Table 1 shows that in a sample of developed and developing countries that have data from the United Nations Crime Surveys (see Fajnzylber et al. 1998 for a description of the data set), none of the cases shown have conviction rates as low as Argentina's.

It should also be recognized, however, that there have valiant attempts to reform Argentine police and judicial institutions in recent years. One such effort was the reform of the Buenos Aires province police initiated in 1998.⁹ In this effort, a significant number of problem officers were fired, the chiefs of police were brought under the oversight of the civilian provincial government, and involved civilian prosecutors in the investigation of violent crimes. While this type of effort is necessary and courageous, it is the type of reform that requires home-grown political will, and it is unlikely that international financial organizations can get directly involved in this type of reform effort. In this context, the provision of information can become another important policy tool for fighting crime and violence.

Victimization surveys are unquestionably the primary workhorse for measuring crime and evaluating its causes. To be really useful, this sort of data must have geographic identifiers which enable the research to link the individual to the community in which he/she lives and was victimized. Then the researcher also needs to know socioeconomic and public security attributes of that community, including the number of police per capita, the unemployment rate, etc. These attributes may be drawn from broader national surveys or national census and police and/or judicial sources.

As discussed below, the implementation of such surveys, including questions regarding the quality of services provided by public security forces and the judiciary can also become useful policy tools.

V. Information Gathering and Analysis as a Policy Tool

On the one hand, having accurate crime maps for major urban centers can help the public security forces allocate their resources more efficiently. However, the surveys proposed above are not a very practical tool for this purpose, because they can only be implemented periodically, perhaps twice annually. And the police forces could benefit from having crime maps, based on the reports of citizens, that are updated around the clock. For this purpose, it is worthwhile to consider investments in technology and training that would lead to the effective implementation of modern crime-mapping system.

⁸ These data also come from the INDEC annual yearbooks. The reader should note that due to measurement error in the crime statistics (they are based on the *recorded* crimes, not the *actual* number of crimes) these ratios actually *over-estimate* the degree of crime deterrence.

⁹ See "Policing the Policia," Los Angeles Times, Sunday, October 10, 1999.

On the other hand, the best technology cannot insure that accurate information will actually be introduced into the crime mapping system. The quality of the information can be compromised by many factors, including the technical abilities of those in charge of recording the citizens' complaints and the confidence that citizens' have on the police forces to whom they must report the crimes. For these reasons, periodic victimization surveys that also include questions about the quality of police services can help to improve both the crime maps and the behavior of the local authorities. The reasoning is that if agents know that their performance will be periodically "judged" by their "clients," then they will face incentives to use the resources at their disposal more effectively towards achieving reductions in crime and violence, rather than for other purposes.

This two-pronged information-based approach also has the advantage that it does not require extremely large investments. However, there are some key elements that are fundamental for the effective implementation of this strategy. These are:

- Strict independence of the survey-implementing organization and analysts,
- Assured anonymity of respondents, and
- Implementation of scientific sampling techniques and survey questionnaires.

If these objectives are achieved in the implementation of this strategy, it is likely that the simple provision of publicly available survey results can significantly alter the incentives of the public security services in a positive direction.

VI. Summary: An Information-Based Strategy

The existing econometric evidence about the economic causes of crime provides a starting point to understand the current Argentine predicament. It is likely that the recent crime wave is being driven by a combination of factors including the deteriorating growth rate and the worsening in the distribution of income. Hence, elements of an economic program that aim to restore healthy economic growth and employment creation, as well as improve the distribution of income are likely to lead to reductions in crime and violence. However, due to criminal inertia, it is possible that the crime-reducing effects of an equitable economic recovery will not be felt immediately.

In addition, there is strong evidence that Argentina suffers from low quality public institutions, which not only impair its economic development, but also tend to contribute to the upward trend in crime rates by making citizens less willing to report crimes and reducing the probability of convicting criminals. Therefore, interventions in the judicial system that result in quality and efficiency improvements are also likely to contain crime and violence in the medium term.

In the area of crime in particular, the combination of information-based tools to help improve the performance of the public security services (i.e., the crime-mapping systems) and independently-run scientific surveys can help contain the current crime wave at an early stage. The implementation of an information-based strategy can help contain crime by improving the efficacy of public security services, while at the same time providing a new information set that can help civil society to make further inroads in understanding the complex multiple causes of the rising tide of crime and violence.

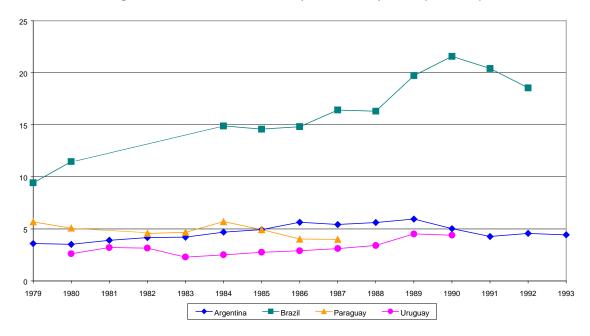
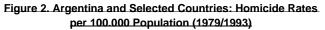
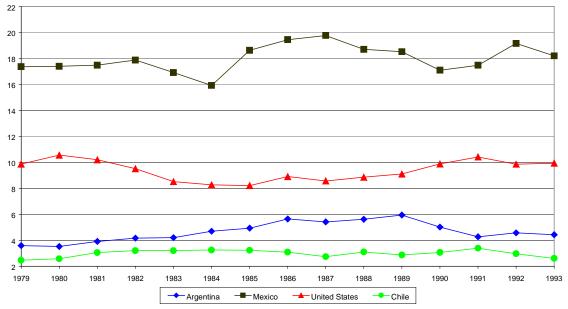


Figure 1. Mercosur: Homicide Rates per 100 000 Population (1979/1993)





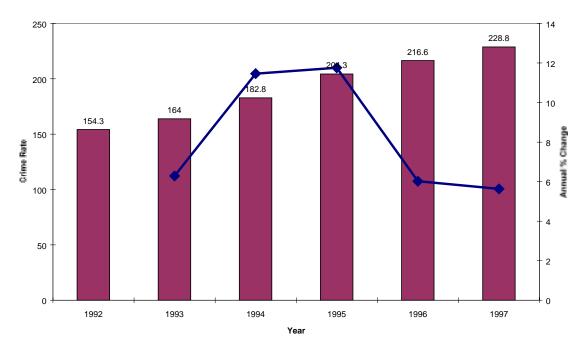
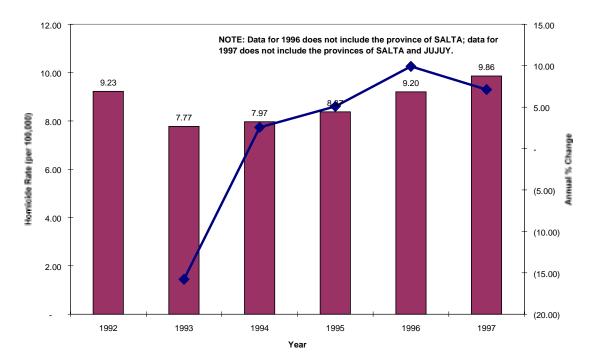


Figure 3. Argentina: Total Crime Rate and Annual Percent Change, 1992-1997 (Crimes per 10,000 People)

Figure 4. Argentina: Homicide Rate and Annual Changes, 1992-1997



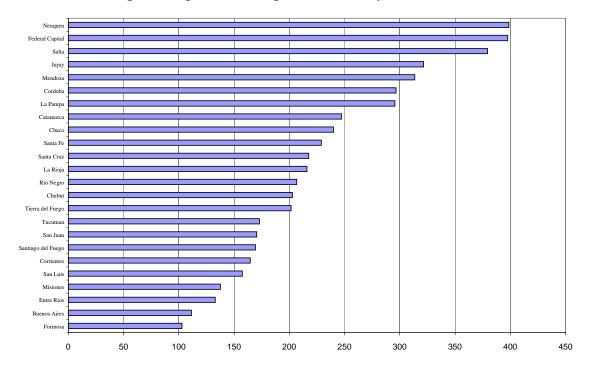


Figure 5. Argentina: Ranking of Crime Rates by Provinces, 1995

Figure 6. Argentina: Conviction Rates, 1992-1997 (% of Total Recorded Crimes)

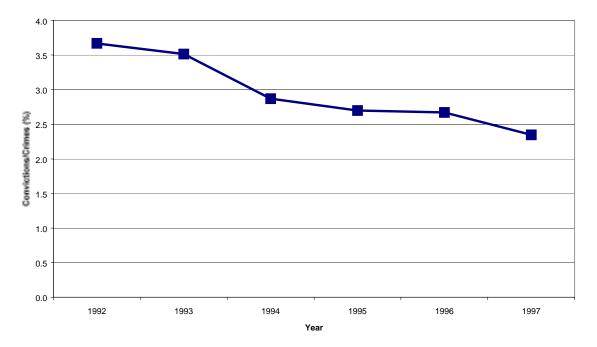


Table 1. Annual Average Homicide Conviction Rates in a Sample of Countries,1990-1994

Country	Convictions / Homicides (%)
Austria	30.6
Costa Rica	57.9
Finland	47.5
France	24.7
Greece	17.7
Hong Kong	17.9
Hungary	64.6
India	55.5
Israel	19.4
Italy	17.4
Jamaica	18.3
Japan	45.7

Source: U.N. Crime Surveys.