



Understanding Crime in Colombia and What Can Be Done About It

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UNDERSTANDING CRIME IN COLOMBIA AND WHAT CAN BE DONE ABOUT IT

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Abstract

We attempt to spell out the causes and costs of Colombia's crime situation. Homicide rates are the highest in the world, three times higher than those of Brazil & Mexico and ten times higher than those of other Latin American countries. Paradoxically, Colombia is not exceptional with relation to property crime. In recent years, homicide rates have dropped in some of the most violent regions. Our conclusion is that drug trafficking coupled with low levels of punishment to criminals are the most important contributors to Colombian exceptional homicide rates. In relation to guerrillas, we find that their activities explain the high rates of kidnapping (and, in particular, its recent upsurge), but they are little related to the evolution of homicide rates. Socioeconomic factors, such as, income inequality and poverty, and sociological factors, such as the notion that Colombians are more violent by nature, do not appear to be the central explanation of crime rates in this country. Accordingly, our main policy recommendations are as follows: more and better information is required, lessening corruption in the criminal justice system is paramount, independent units for fighting kidnapping and homicides are needed, and financing the guerrillas so that they stop kidnapping should be explored. Most of our recommendations are related to the Colombian criminal justice system, the Plan Colombia and the drug policy.

I. Introduction

Homicide rates in Colombia are among the highest in the world. At the peak in 1991, almost one in a thousand Colombians were murdered each year. The homicide rate in Colombia is three times higher than Brazil or Mexico, and ten times higher than Argentina, Uruguay, or the United States. High homicide rates, however, do not tell the full story of Colombian crime. There is enormous variation across the country in crime rates. With respect to property crime, Colombia does not look exceptional compared to other Latin American countries. In recent years, homicide rates have begun to fall in the most violent areas of Colombia.

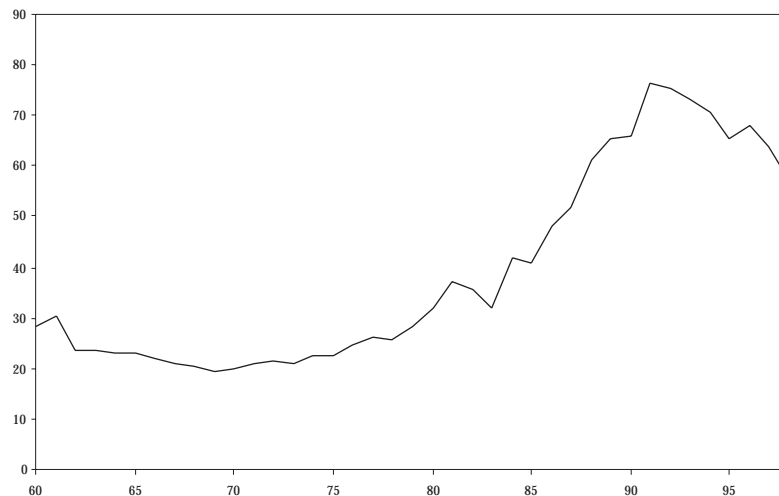
In this chapter, we attempt to better understand Colombia's crime situation. We begin by laying out the relevant facts in Section I to guide the discussion that follows. In section II, we review the literature examining crime in Colombia. Section III examines the theoretical and empirical evidence regarding competing explanations for the Colombian crime situation. It is our belief that high rates of homicide in Colombia can largely be explained by the breakdown of the criminal justice system and the prevalence of the illegal drug trade. Guerrilla activity appears to be systematically related to the kidnapping epidemic. Because we feel that the best way to lower crime in Colombia is to fix the beleaguered and over-burdened criminal justice system, we devote Section IV to describing the present criminal justice system. The chapter concludes by offering a series of recommendations for lessening the burden of crime felt by Colombian citizens as quickly, humanely, and cost-effectively as possible.

II The Facts about Colombian Crime

A. Homicide Rates

After the period of political violence known as La Violencia, homicide rates in Colombia remained almost stable for nearly two decades around 20 homicides per 100,000 residents annually¹. In the late

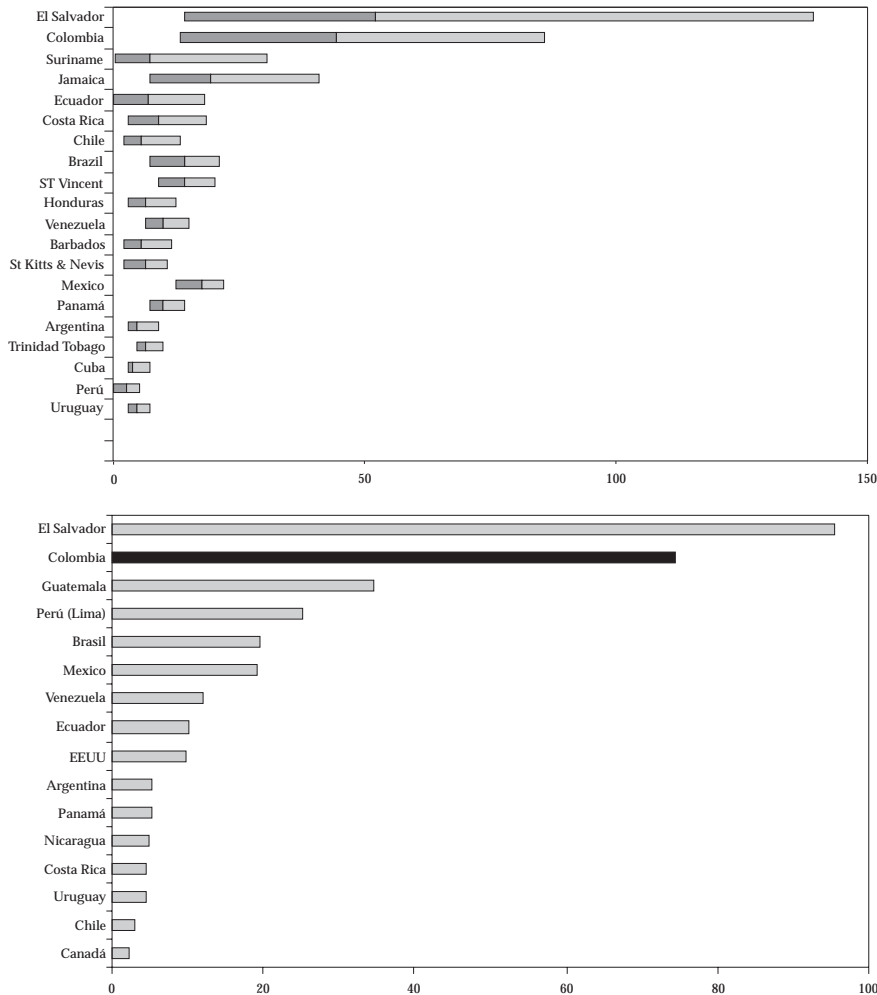
Figure 1. Homicide Rate 1990-1998



Source: Police Department of Colombia.

¹ Throughout the paper, we will report homicide rates in terms of homicides per 100,000 residents per year.

Figure 2. Homicide Rate - Latin America



Source: Fajnzylber et. al. (1998), Buvinic and Morrison (1999).

seventies a sharp increase began, reaching a peak near 80 per 100,000 in 1991. Afterwards the aggregate number of homicides began to fall significantly, but not as rapidly as it grew before (Figure 1)

Even by Latin American standards, where rampant violence during the 90s has been a major concern, Colombian violence looks unusually high. Only El Salvador, another country with a long civil conflict, surpassed Colombia in terms of homicide rates in the last decade (Figure 2).

B. Crime Rates

Official data on other crimes are much less reliable than for homicides, for two reasons. First, only a fraction of crimes committed crimes are reported by the victims to the police. Second, it seems that not all reported crimes are registered in the police statistics. Victimization surveys provide an alternative source of data to official records, but only two such surveys are available for Colombia² The official data and the victimization surveys tell a very different story. Police statistics show a conti-

² See Rubio (1999) for the problems with the 1991 survey.

nuous decline in crime rates from the beginning of the 80s, whereas victimization surveys show a small increase (less than 7%) in the overall crime rate between 1985 and 1995 and a sharp increase in violent crime (violent property crime grew 106% in that decade). There is even an inconsistency between the official figures (crime reports) and what the victims said they reported to the police in the victimization surveys (Figure 3).

This notable and increasing discrepancy between official records and victimization figures (42% in 1985 and 111% in 1995) can be explained by a perverse tendency of the Colombian criminal justice system to focus only on crime where offenders have been identified by the victims at the expense of unsolved crime. Cases with an unidentified criminal have been progressively left out, even from the statistical records. It is not a matter of coincidence that there exists a strong association between crime rates as reported by the police and the number of apprehended offenders (Figure 4)

Although under reporting of crime and low quality police statistics make international comparisons difficult, Colombia's crime and reporting rates can be brought into a Latin American context with two alternative sources of data on victimization. The first one is the Latinobarometer, a public opinion survey with a criminal incidence module³. The second one is the International Crime Victim Survey (ICVS), now available for six Latin American countries⁴.

Overall, what these surveys show is that Colombia is not exceptional in terms of general criminal incidence. According to Latinobarometer, Colombia shows a very high level of average victimization: more than 35% of households were victimized during the year before the survey. But this is not unusual for Latin American countries. In fact, higher rates were observed in 11 of the 17 countries included in the sample. The highest rate, in Guatemala, is almost 15 percentage points higher than the rate for Colombia (Figure 5). Colombia also fits the continental pattern of positive connection between socioeconomic status and victimization rates⁵.

ICVS results corroborate the impression that Colombia is not anomalous among Latin America countries in terms of overall criminal incidence. At the moment ICVS results are available only for a small sample of Latin American countries: Colombia, Paraguay, Bolivia, Argentina, Brazil and Costa Rica. None of the countries with highest overall victimization rates according to Latinobarometer, however, are included in the ICVS sample. Even so, Colombia does not stand as the leader in any of the criminal incidents individually considered in the ICVS survey (Figure 6). Colombia's highest ranking, after Brazil and not far above Bolivia and Argentina, is for assault with force.

Nor does Colombia appear to be an outlier in the ICVS with respect to a) reporting rates to the police (Figure 7); b) avoiding places when going out after dark; c) general fear of crime; d) subjective likelihood of burglary or even e) gun ownership for crime prevention purposes, which is higher in Costa Rica, Argentina and Paraguay⁶.

C. The drop in the homicide rate in the 90s

Since 1991, the homicide rate in Colombia has fallen more than 20 percent. As Figure 8 demonstrates, almost all of the national decline is attributable to a fall in homicides in Bogotá, Medellín, and Cali. At

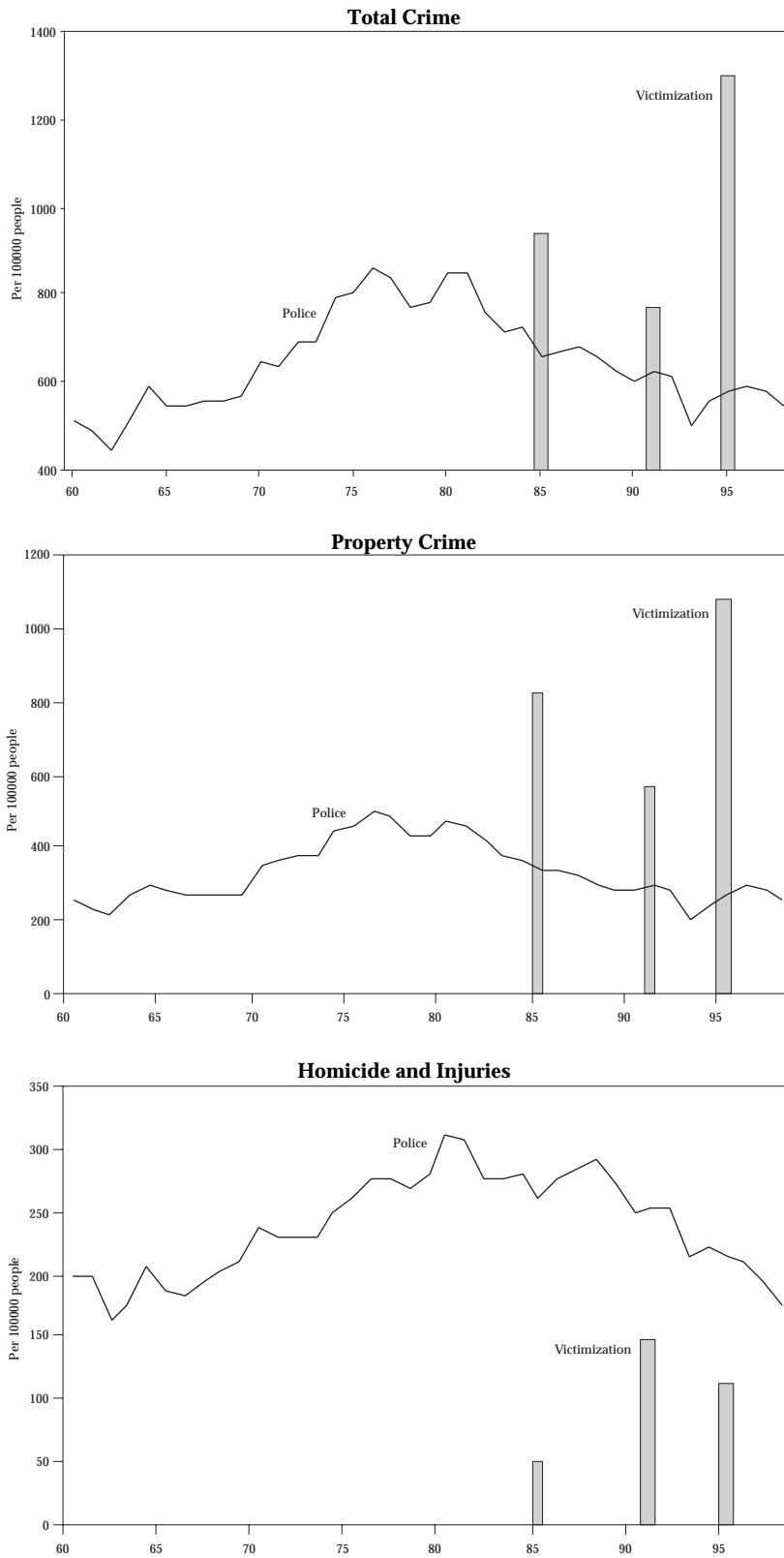
³ See Gaviria and Pagés (1999).

⁴ See Alvazzi del Frate (1998). Data for Colombia in the ICVS comes from a survey done in Bogotá in 1997.

⁵ Gaviria and Pagés (1999) page 3.

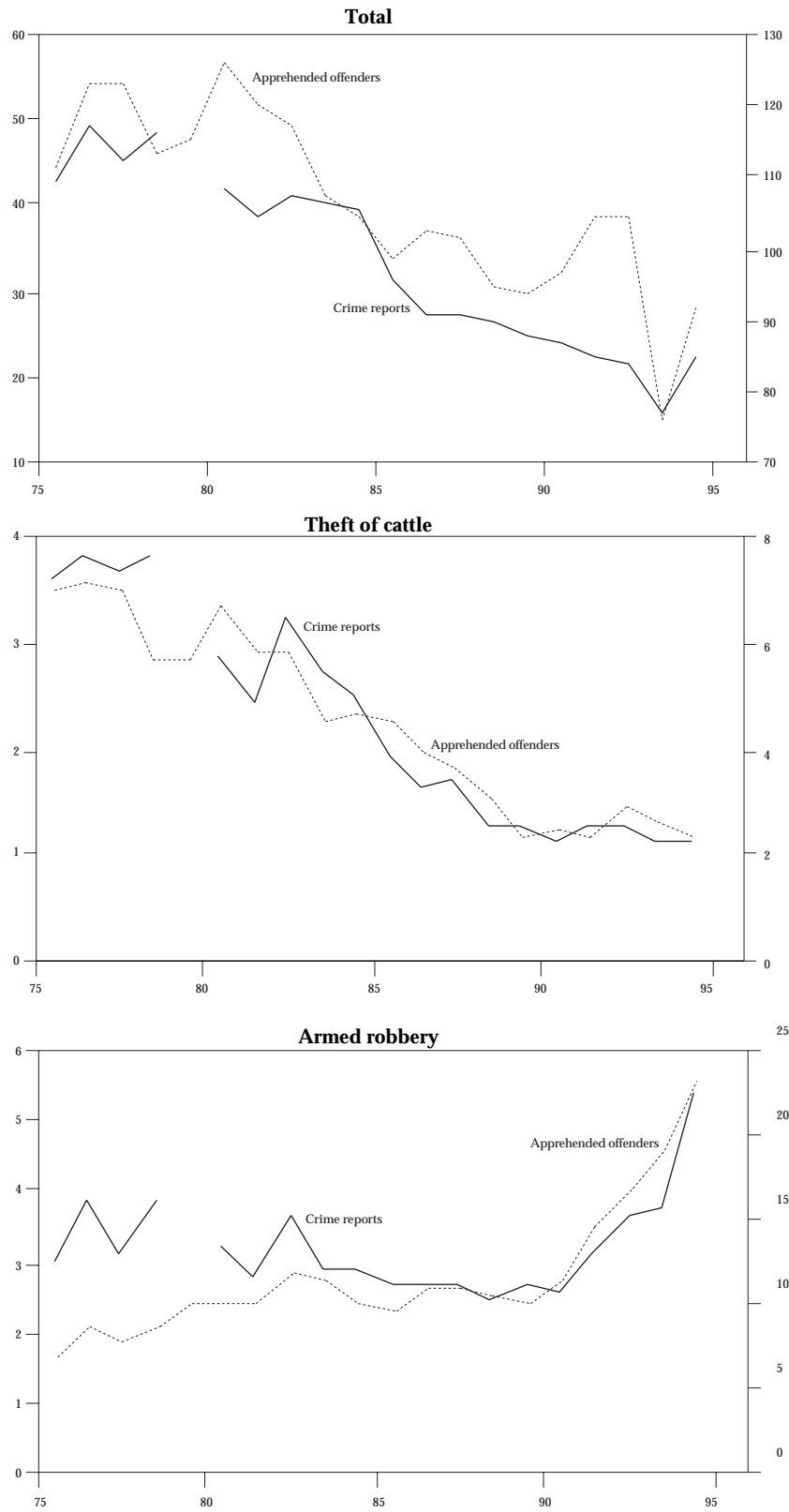
⁶ Alvazzi del Frate (1998) page 132.

Figure 3. Crimer Rates - Reports National Police and Victimization Surveys



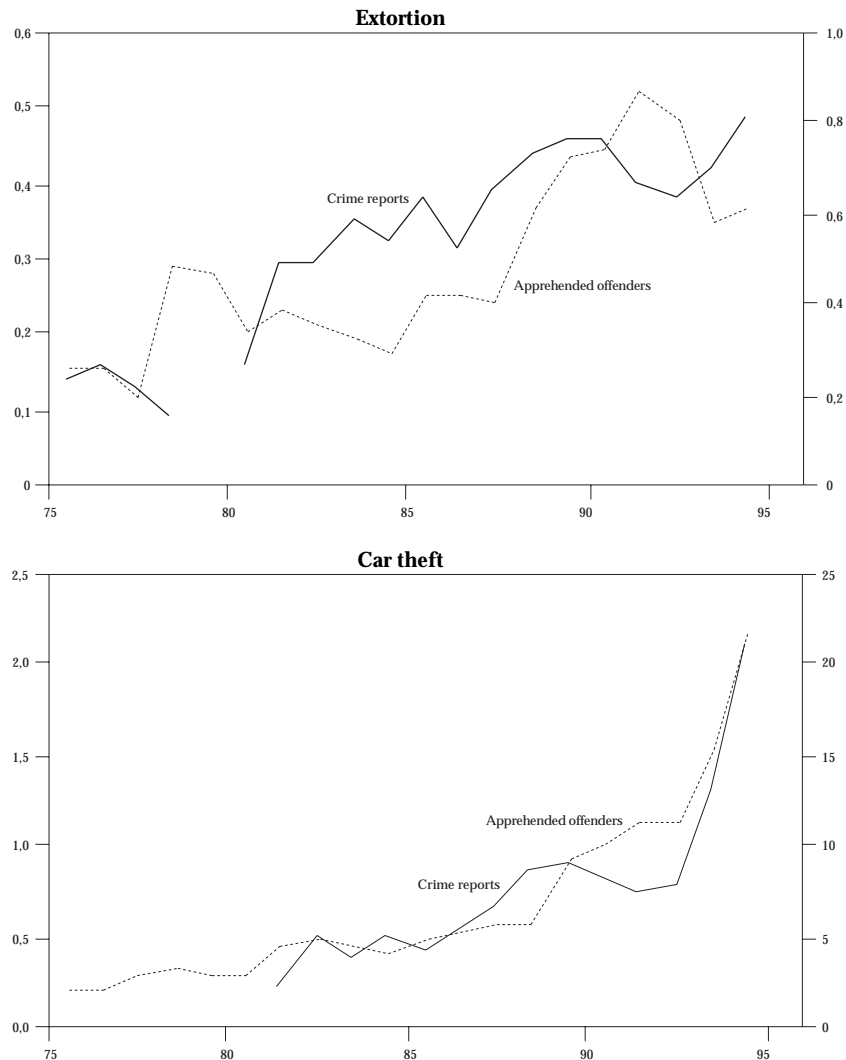
Source: Police Department of Colombia.

Figure 4. Police Crime Statistic



Source: Police Department of Colombia.

Figure 4. Police Crime Statistic

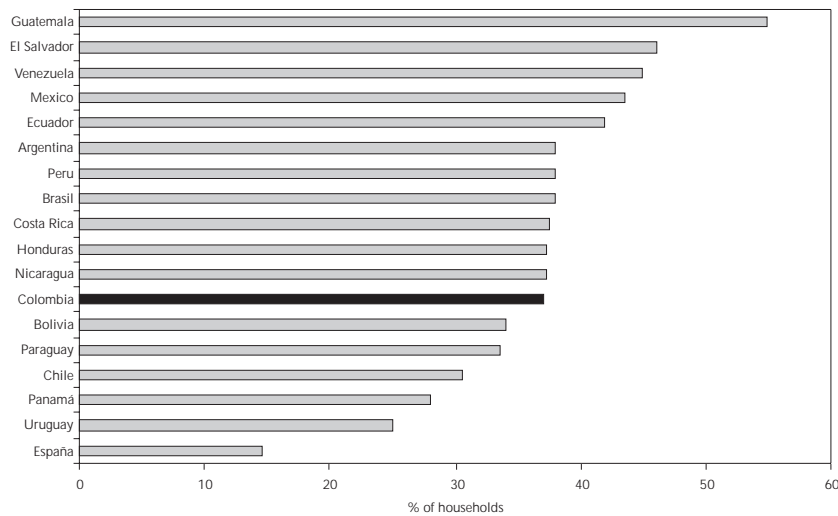


Source: Police Department of Colombia.

the peak in violence in 1991, homicides in the three main cities, Bogotá, Medellín and Cali accounted for 38% of the national total. That year, the Medellín figure began to fall. Homicides in Bogotá reached their maximum level in 1993 while the break in Cali came one year later. The average homicide rate in these three cities fell from 120 per 100,000 in 1991 to less than 80 in 1997, their share of the total number of murders decrease to about 30%. The homicide rate for the rest of the country remained practically constant at 60 per 100,000 between 1991 and 1997 (Figure 8).

A closer look at the rate of change of homicides in the other municipalities shows that this stable aggregate scenario is not the result of a homogeneous evolution, but rather, the consequence of falling rates in some places that were compensated by rising rates in other municipalities. Between 1990 and 1997, one fourth of municipios showed a decrease in homicides rates between 0% and 10%; but another third suffered a similar increase. In 12% of the municipios homicide rates fell between 10% and 20%, but in a similar proportion of localities homicides rose by the same amount (Figure 9).

Figure 5. Victimization Rates - Latin America



Source: Latinobarómetro - from Gaviria and Pagés (1999).

Furthermore, changes in homicide rates are negatively associated with the levels of violence in 1990. In the 200 most violent⁷ municipios, homicides reached a peak of 220 per 100,000 in 1991 and then dropped to less than 140 in 1997. On the other hand, in the 200 most peaceful localities, homicide rates remained almost stable between 1990 and 1994 but suddenly increased from 7 per 100,000 to almost 14 after 1995 (Figure 10).

Another way of looking at this kind of convergence in homicide rates is to compare the distribution of homicides across municipios at different points in time. In 1990 35% of municipios had a rate less than 10 per 100,000. In 1997 only 20% showed such a low level. On the other hand, in 1990 30% of towns had a homicide rate between 10 and 50. By 1997, 42% of localities were in such a range (Figure 11).

A third way of demonstrating the progressive spread of violence during the 90s is the calculation of a Lorenz curve, which shows the what proportion of the population is responsible for what proportion of homicides and how this distribution changed between 1990 and 1997. In 1990, the 20 percent of the population in the least violent municipios, committed less than 5% of the homicides. By 1997 this figure reached almost 10%. It is clear that between 1990 and 1997 the distribution of violence across the population became much more even (Figure 12).

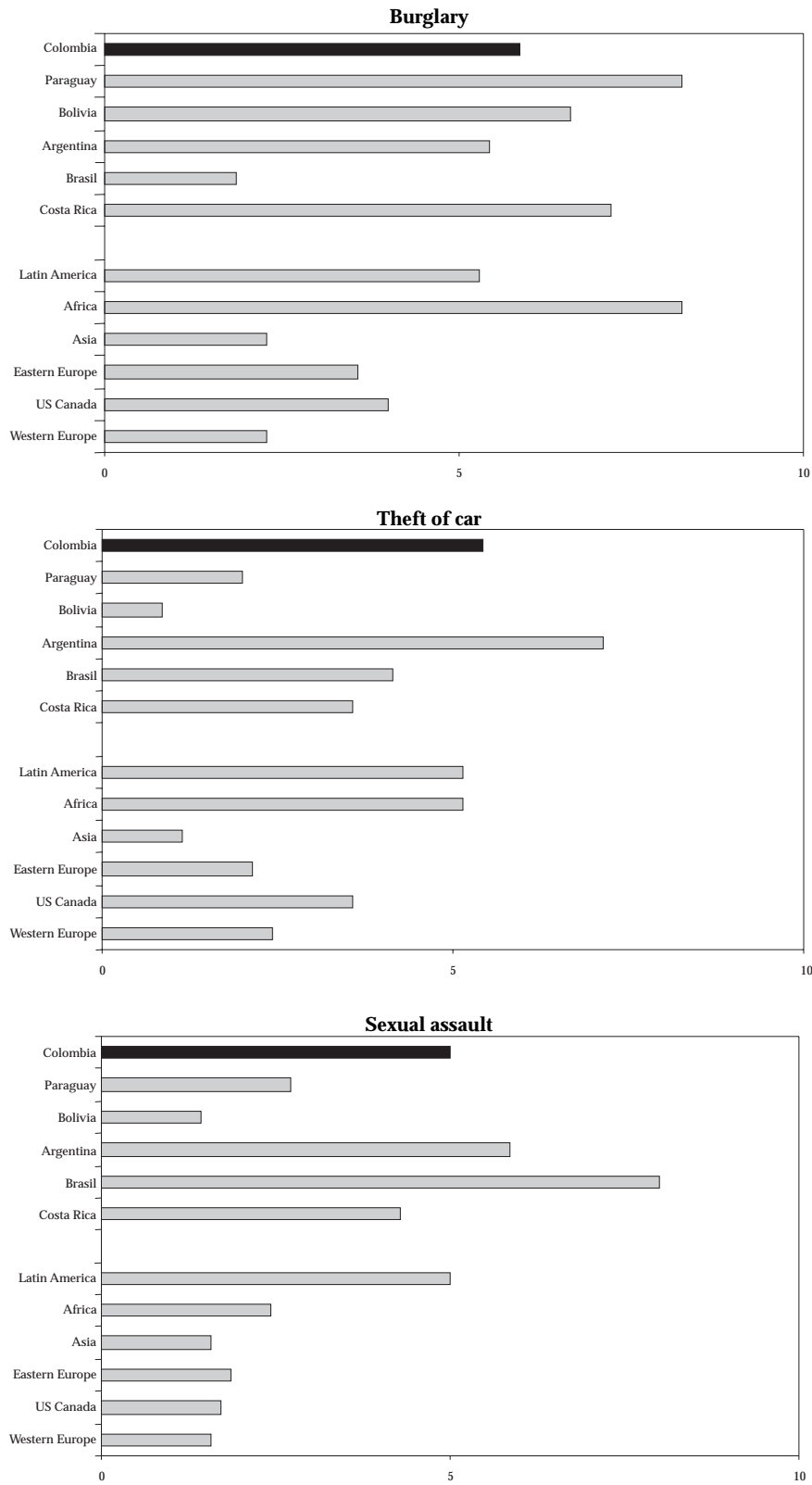
III. Costs of Crime in Colombia

In this section we offer an overview of the literature on costs of crime in Colombia. We concentrate on work trying to analyze the impact of crime on the allocation of resources and efficiency.

Three categories of "efficiency studies" can be mentioned. First, there are some papers about public and private expenditures to prevent and control crime. Second, studies that deal with the impact of violence on physical capital (environment, infrastructure) or human capital. Third, a Colombian specialty, papers that analyze the impact of crime on aggregate investment and productivity growth.

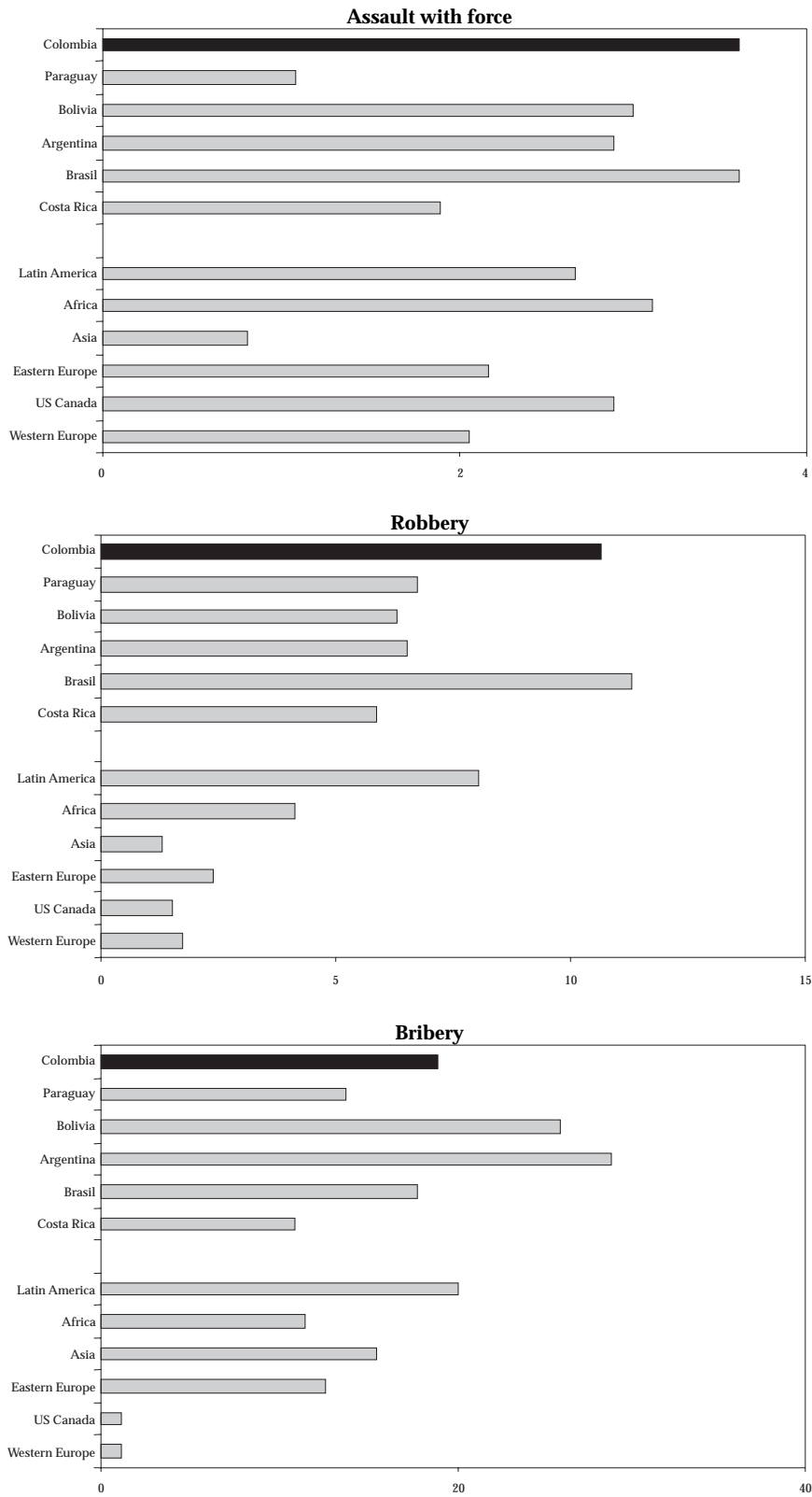
⁷ In terms of the average 1990-1997 homicide rate.

Figure 6. Victimization Rates - Latin America and the World



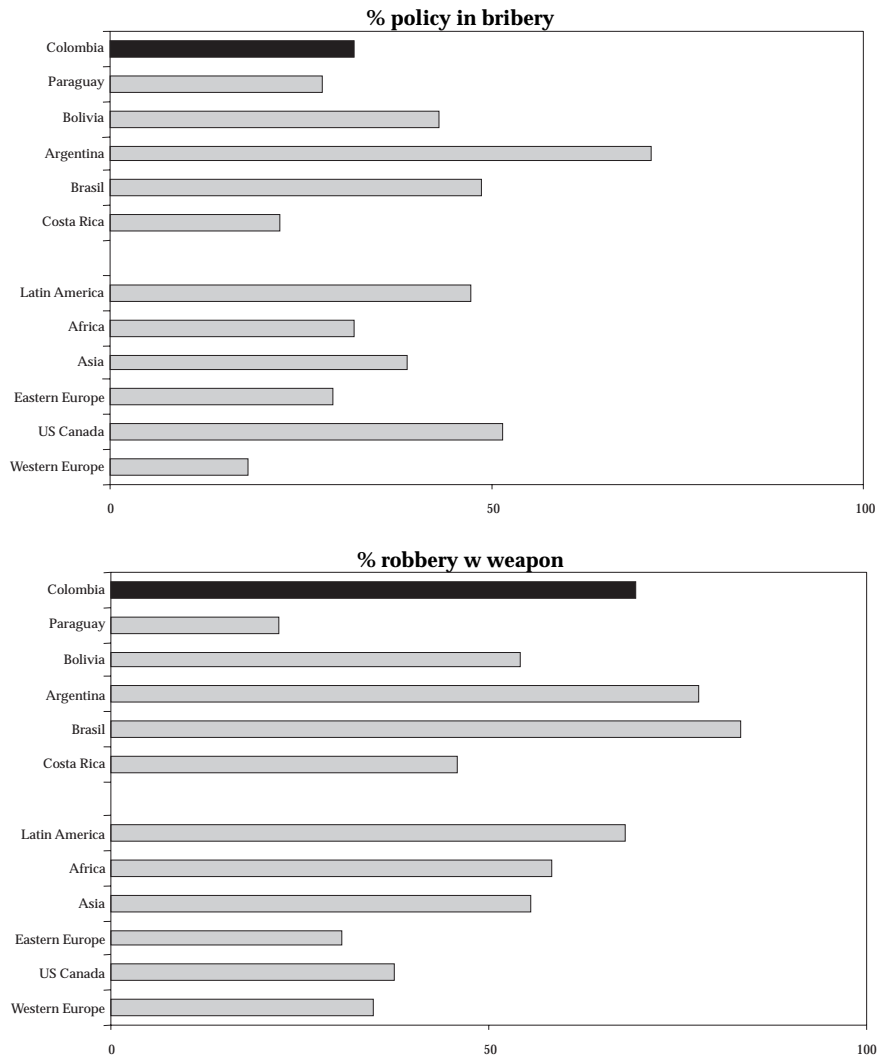
Source: International Crime Victim Surveys - from Alvazzi (1998).

Figure 6. Victimization Rates - Latin America and the World



Source: International Crime Victim Surveys - from Alvazzi (1998).

Figure 6. Victimization Rates - Latin America and the World



Source: International Crime Victim Surveys - from Alvazzi (1998).

A. Expenditures to prevent and control crime

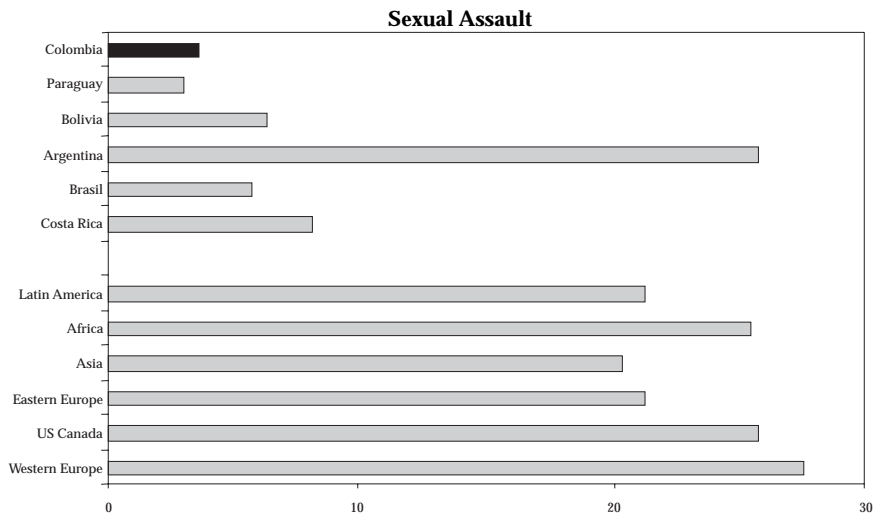
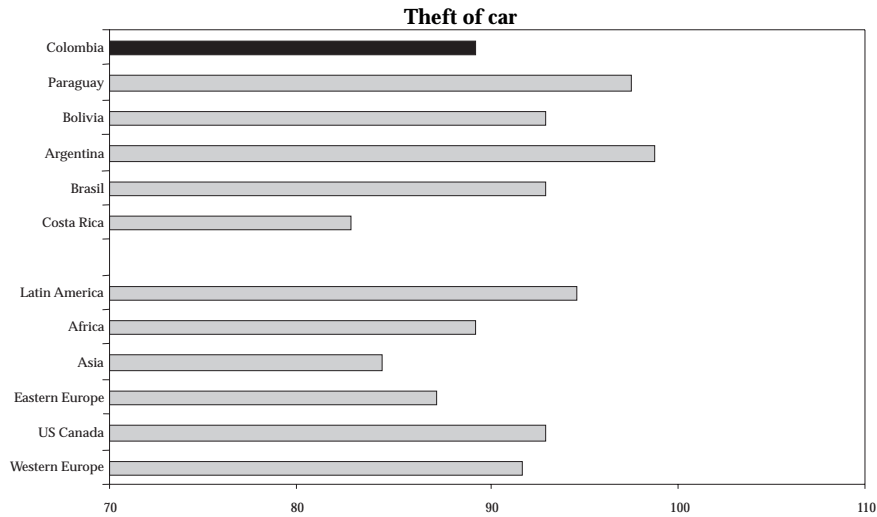
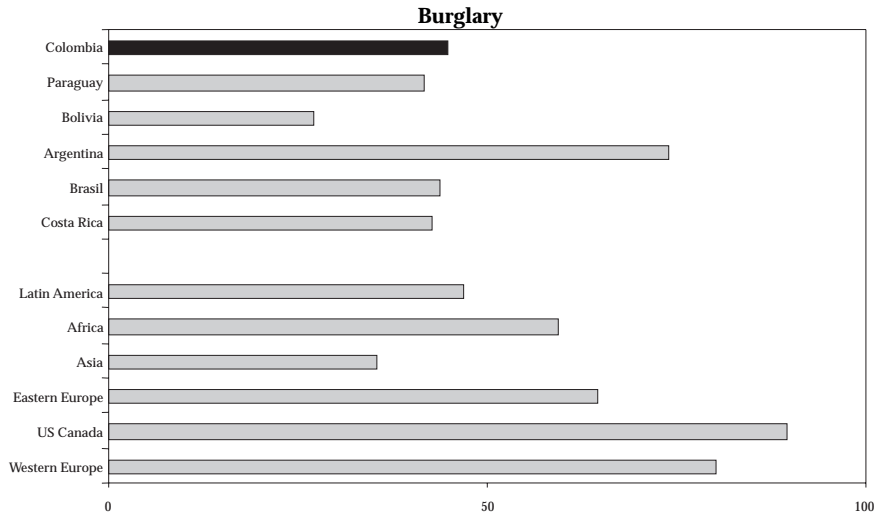
The interest of public health professionals in violence has led to emphasis in the calculation of the financial burden of violence on medical assistance to the victims. For Latin America, health is probably the sector where cost accounting methodology⁸ and detailed case studies⁹ are most developed.

In sharp contrast with this interest in public health, detailed cost studies of prisons, the judiciary, the police, or the military are hard to find. Papers dealing with the aggregate evolution of military or judiciary expenditures are recent. The methodology is still quite simple: analysis of budget trends and correlation with aggregate variables. This type of study faces serious difficulties in getting even basic

⁸ See Bobadilla et al [1995].

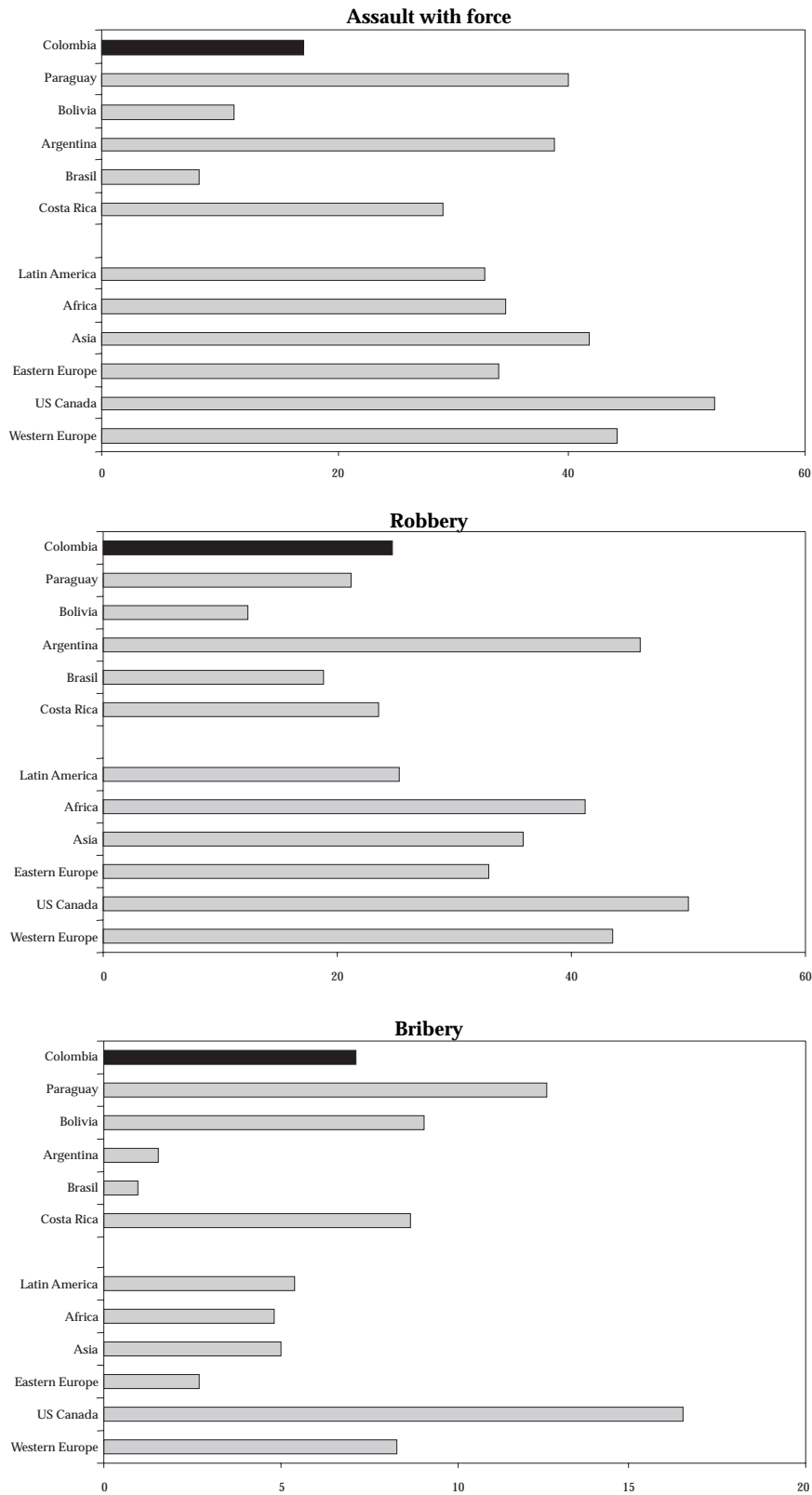
⁹ Studies for Río de Janeiro, Sao Paulo, Kingston, México and Perú can be found in Domínguez et al. For Colombia there is some work in Ministerio de Salud [1995] and Trujillo y Badel [1998].

Figure 7. Reporting Rates - Latin America and the World



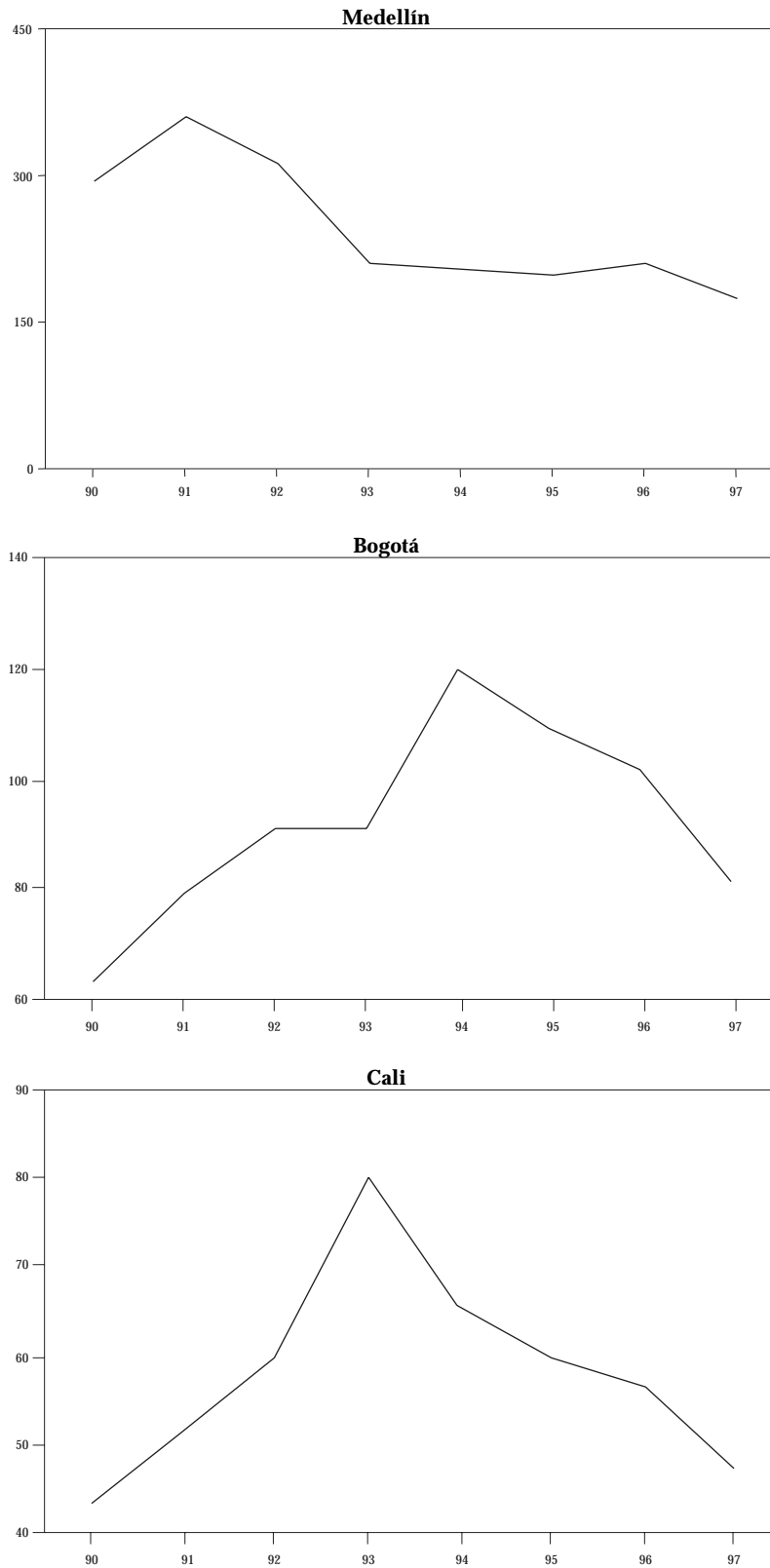
Source: International Crime Victim Surveys - from Alvazzi (1998).

Figure 7. Reporting Rates - Latin America and the World



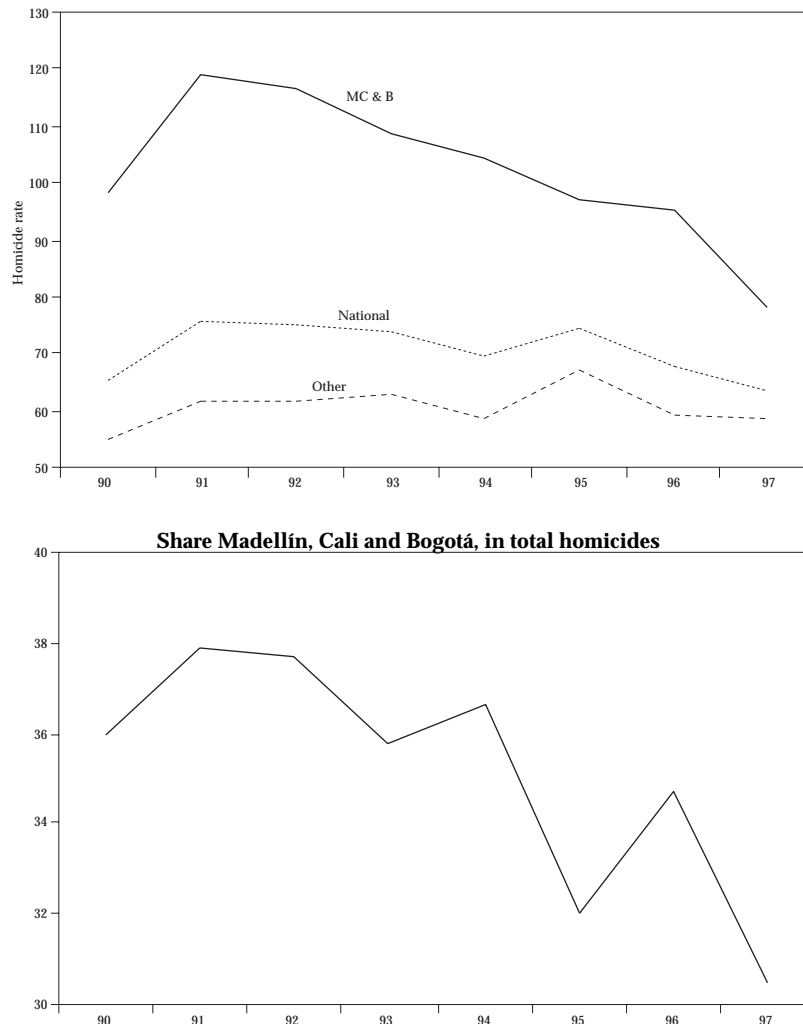
Source: International Crime Victim Surveys - from Alvazzi (1998).

Figure 8. Falling Homicide Rate in the 90's Medellín, Bogotá and Cali



Source: Police Department of Colombia.

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Source: Police Department of Colombia.

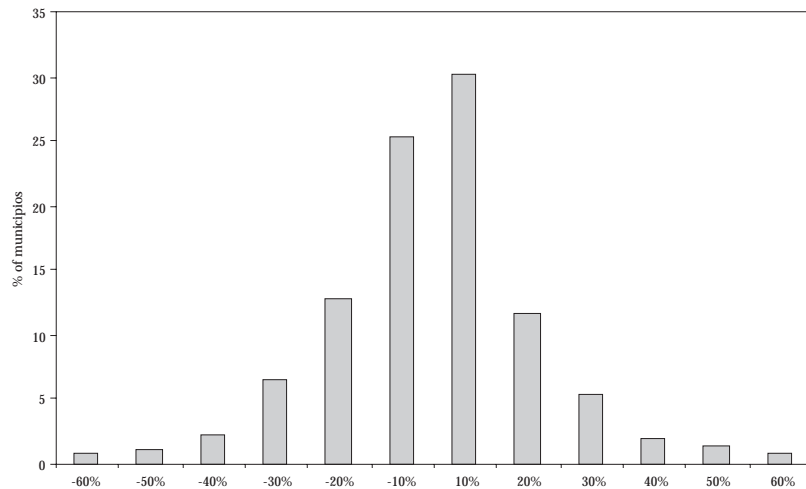
data. Some analysts argue that military expenditure records are completely unreliable¹⁰. Leal [1995] offers a descriptive analysis of the evolution of military expenses since the 50s: there seems to be an increasing participation in overall public expenditures. Granada and Prada [1997] model the "demand" for military expenditures as a function of GDP, total public expenditure, homicide rate and number of guerrilleros. They conclude that: a) there is a long run and stable correlation between military expenditure and guerrilla growth; b) there is a strong inertia and c) homicide rates do not help to explain the dependent variable.

Recent work shows¹¹ that public expenditures in security and justice are now around 5% of GDP, with a rise of nearly 2% during the 90s.

¹⁰ Leal [1994] or IEPRI [1997].

¹¹ Comisión de Racionalización del Gasto y de las Finanzas Públicas [1996] "Defensa, Seguridad Ciudadana y Gasto Público" y "El Sistema Judicial y el Gasto Público" Mimeo - Bogotá Mimeo - Bogotá.

Figure 9. The 1990-1997 Change in Homicide Rates was not Even



Source: Authors Calculations - Policia Nacional.

As for private expenditures in security and protection, information is scarce. There is some data about the labor force involved in these activities but only for the legal and regulated firms. This data shows that the increase in private security guards has been faster than for police officers: in 1980 there were 2.5 police officers for each private guard. In 1995 this ratio had been reduced to 1¹².

Information about the evolution of other armed private guards, informal or illegal, is non-existent. For paramilitary groups there is no agreement about the number of combatants. One may assume that their evolution has been similar to that of the guerrilla. Journalistic estimates of the paramilitary are around 10.000 men with a per-capita monthly cost of around US\$ 500.

Ethnographic work¹³ suggests that in popular neighborhoods gangs offer private protection and private justice services¹⁴. Some surveys corroborate these findings: in Bogotá, Cali and Medellín 22% of the households reported an influence in their neighborhood of armed groups different from guerrillas¹⁵.

The social impact of private protection gangs goes beyond efficiency considerations. For Medellín, Jaramillo [1993] and Corporación Región [1997] show that when private protection schemes become generalized, and there are links with organized crime, there is a progressive concentration of criminal activities, a reduction in petty crime, and high homicide rates. The 1995 victimization survey corroborates this for Medellín: low overall victimization and high homicide rates¹⁶.

Information about household expenditures on protection and security is scarce. Rubio [1997], based on a survey for Bogotá, Cali and Medellín, estimates this figure around 1.4% of GDP.

¹² Ospina [1996].

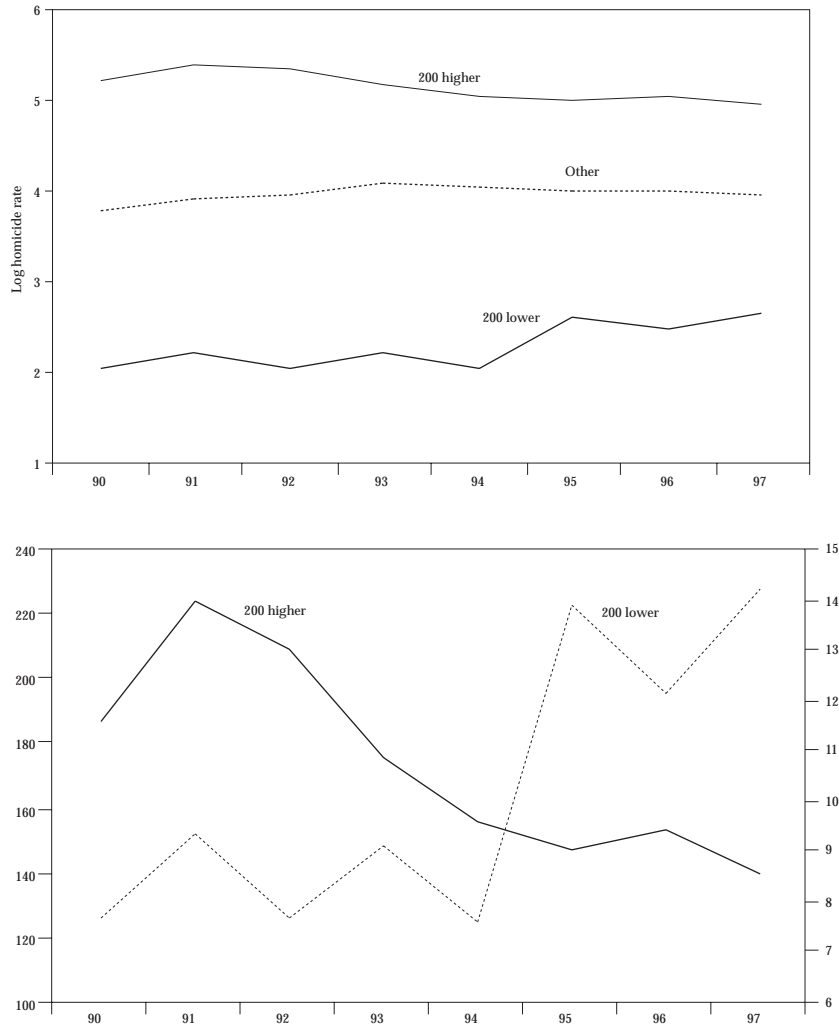
¹³ Jaramillo [1993], Corporación Región [1997], Salazar [1994].

¹⁴ For Medellín, there is such a proliferation of bandas and milicias that it has been estimated that every popular neighborhood has its own private army. Corporación Región [1997].

¹⁵ Rubio [1997].

¹⁶ Rubio [1996].

**Figure 10. In 200 Most Violent Municipios: Drop in Homicide Rate
In 200 Least Violent Municipios: Rise in Homicide Rates**



Source: Authors Calculations - Policia Nacional.

B. Destruction and damage of capital

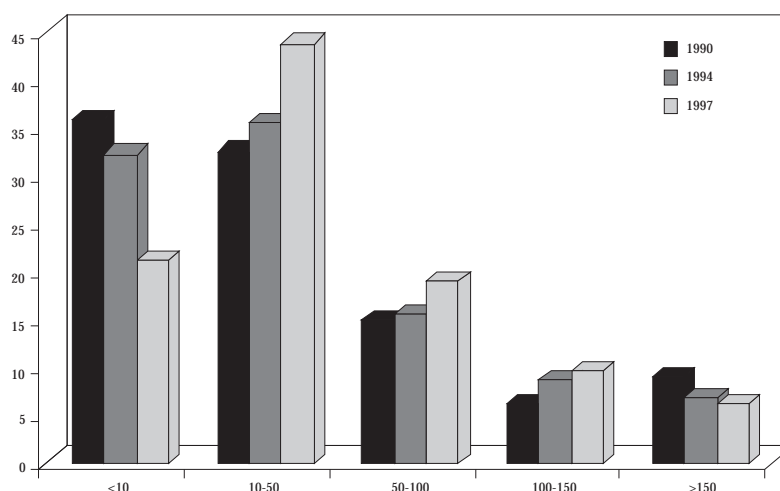
Londoño [1998] estimates that human capital lost because of violent death amount to around 4% of GDP each year¹⁷. Trujillo and Badel [1998], with a quite rigorous methodology, calculate this cost at around 1% of GDP. In these two papers loss of human life is converted to money terms. Other studies¹⁸ estimate the figures in "AVISA"¹⁹. A detailed inventory of the demographic impact of violence is given in INS-CELADE [1991] and Romero [1997].

¹⁷ There is no detailed explanation of the methodology.

¹⁸ INS [1994] or Echeverri et al [1997].

¹⁹ "AÑOS DE VIDA SALUDABLE PERDIDOS".

Figure 11. Distribution of Homicide Rates in Municipios 1990, 1994, 1997



Source: Authors Calculations - Policia Nacional.

Much attention has been given to the problem of the "desplazados" or internally displaced people²⁰. Defensoría del Pueblo estimates around 200.000 people the yearly flow of "desplazados", 50% of which are infants.

A second dimension of the destruction of capital deals with the damage to infrastructure -petroleum, electricity, roads, airports- and to the environment. Cost estimation has normally been limited to repairs. Even with such under estimation, costs have been calculated around 1% of GDP²¹.

C. Impact on Investment

Some effort has been done to show how crime has an impact on human capital investment. First, there is the effect of organized crime recruiting young people²² and the impact that the armed conflict is having on children²³. On the other hand, a national survey estimates that 14% of students of night schools quit for security reasons and that night shift jobs for young people have been reduced by almost 30%.²⁴ Knaul [1997], with data for Bogotá, measures the impact of violence in school enrollment.

Bejarano (1988) may be the first paper showing how violence negatively affects investment and production decisions in agriculture. Thoumi (1990) offers a similar argument. Several recent econometric studies corroborate these early insights. Rubio (1995) proposed that violence had an effect on investment and productivity growth. Statistical evidence with aggregate data corroborates such an

²⁰ A review of the literature up to 1995 in Conferencia Episcopal de Colombia [1995]. See also Murillo y Herrera [1991], Giraldo, Abad y Pérez [1997] and Morrison y Pérez [1994].

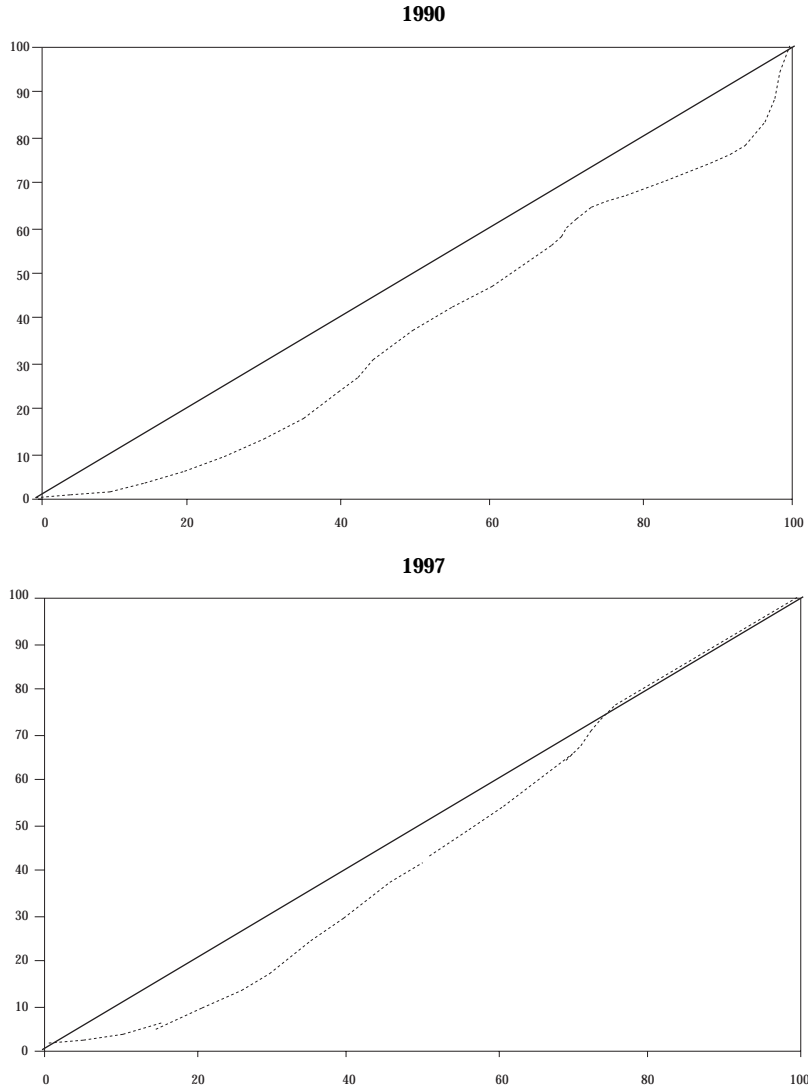
²¹ Trujillo y Badel [1998].

²² Corporación Región [1997], Jaramillo [1993, 1994], Salazar y Jaramillo [1992], Salazar [1994].

²³ Defensoría del Pueblo [1996].

²⁴ Cuéllar [1997].

Figure 12. Lorenz Curve - Population and Homicides 1990-1997



Source: Authors Calculations - Policia Nacional.

impact. It is found that the compound impact on GDP growth could have been as high as 2% in some years. Bonell et al [1996] re-estimated three previously published (between 1976 and 1990) investment models introducing the homicide rate as an additional independent variable. They found a negative and statistically significant effect. Parra [1997] also estimates several investment functions using the homicide rate as an right hand side variable and finds a negative, significant effect. She finds that the impact on investment could have been as high as 40% in some years. Cross-section growth models for Latin America that include the homicide rate as an explanatory variable corroborate these findings²⁵. Plazas [1997], using time series data for departamentos, finds that kidnapping, more than homicide, has an impact on productivity growth.

²⁵ Corbo [1996].

Chica [1996] reviews the results of econometric work done in the National Study on the Determinants of Productivity Growth. Two of these models included violence as an explanatory variable and found a robust influence. Sánchez, Rodríguez and Núñez [1996] with econometric work also find an effect of violence on productivity growth²⁶.

IV. Explanations for Colombia's High Crime rate

The reasons for Colombia's crime problem are undoubtedly complex. Entangling the causes of the situation is an inherently difficult task made even harder by serious data limitations. Due to these data restrictions, we focus the analysis that follows almost exclusively on homicide, the crime for which the data are best. We devote this section of the chapter to scrutinizing the leading explanations for why crime is so high in Colombia. The five explanations we consider are (1) the illegal drug trade, (2) the lack of punishment of criminals, (3) the presence of extra-governmental groups (guerrillas and para-militaries) that have taken over traditional governmental roles in parts of the country, (4) poverty/income inequality, and (5) the possibility that Colombia's decades of internal strife has created a populous that is simply more innately violence prone. For each of these five explanations, we consider the theoretical justification for the argument, the international evidence, and whatever Colombian data are available. We address the various arguments one at a time.

A. The Drug Trade

There has never been anything approaching agreement among Colombian analysts about the size of drug exports or production activities, much less about the country's share in the world trade²⁷. L'Observatoire Geopolitique des Drogues²⁸ argues that during the 80s there was a spreading of influence from Colombian drug cartels to neighboring countries through the imports of chemicals and money laundering. But it was in 1989, after the murder of presidential candidate Luis Carlos Galán and the subsequent war against the Medellin cartel that the Colombian drug lords rapidly spread their activities all over the continent. By the mid 90s there was "no single country in Latin America or in the anglophone Caribbean islands that is not involved, in one way or another, in the production and trade of drugs"²⁹.

Colombia is still considered the leader in the cocaine export business. Most of the coca is now cultivated in the country but there are still imports from Peru and Bolivia³⁰. Although the DEA argues that 75 percent of the cocaine reaching the United States originates in Colombia, there seems to be consensus that nowadays that Mexico is the number one route for drugs entering the U.S.³¹. Since getting the drug into the consumers market has been long recognized as the lion's share of the business³² this new scenario suggests a decreasing share of Colombian profits in the Latin American drug trade.

²⁶ All this work has been done with aggregate data. The impact at the micro level has only been analyzed for agriculture. Bejarano(1996) or Escobar [1994].

²⁷ See Thoumi (1994) or Steiner (1998) for "size of the industry" estimates and comparisons.

²⁸ Koutozis (1996). Atlas Mondial des Drogues. Paris: Presses Universitaires de France.

²⁹ Ibid page 82.

³⁰ Rufin, J C (1999). Mondes Rebelles. Guerres Civiles et Violences Politiques. Paris: Editions Michalon.

³¹ See for example «Uncle Sam's war on drugs». The Economist. February 20th 1999. Page 59.

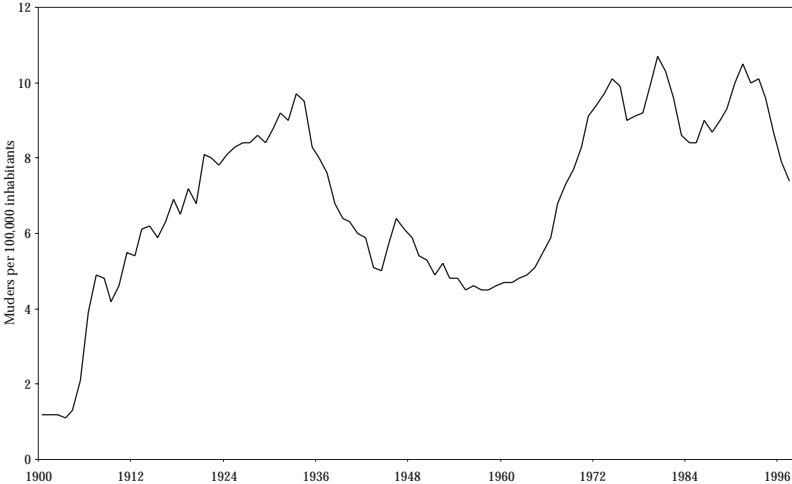
³² Thoumi (1994) or Rocha (1997).

Estimates of the revenues of the drug trade in the Colombia show high variance but, for the late 80s, run as high as U\$5.500 million dollars, whereas minimum estimates were around U\$1.200 millions (Thoumi 1994 and Steiner 1998 review this literature). This range in the value of cocaine exports is equivalent to 3-14 percent of Colombian GDP

There is overwhelming evidence that the drug trade encourages violence. From a theoretical perspective, drug distribution fosters violence because participants, unable to legally enforce contracts and property rights, turn to violence and intimidation to accomplish these tasks. The illegality of drugs makes traditional forms of industrial competition like advertising and price cutting more difficult. Instead violence is the primary means of establishing market dominance. It has also been argued that the continuing presence of this lawless sector erodes respect for the law among those outside the drug trade, as well as diverting limited criminal justice budgets from the enforcement of everyday crime to breaking the drug cartels.

Empirically, both international and Colombian data unambiguously suggest a causal link between the drug trade and high levels of violence. The experience of the United States is very telling.³³ Figure 13 presents homicide rates per capita in the United States over roughly the last 100 years. There are two periods in which homicide is exceptionally high: the Prohibition years (1920-33) when the sale of alcohol was outlawed, and the early 1980's to the early 1990's when powder cocaine, and later crack cocaine flourished in the U.S. The gangsters of the U.S. Prohibition years (legendary names like Al Capone and Bugsy Malone) were as notorious and ruthless in their day as Pablo Escobar. After Prohibition was ended, homicide rates quickly reverted back to typical ranges. The crack cocaine epidemic is also clearly associated with a spike in violence. Black street gangs, dominated by youths, overwhelmingly controlled the distribution of crack cocaine at the street level. Between 1985 and 1991, homicide rates for Black males aged 18-24 more than tripled according to the Bureau of Justice Statistics. Kennedy et al. (1996) and Levitt and Venkatesh (2000) demonstrate these homicides were heavily con-

Figure 13. Murder Rate in the United States: 1990-1997



Source: National Center for Health Statistics, Vital Statistics.

³³ Much of the international evidence presented in this chapter will rely on research using United States data. This partly reflects the fact that the United States has some of the most reliable crime statistics available and thus has been the focus of a great deal of research, but also reflects the fact that one of the chapter's authors has a particular expertise in U.S. crime.

centrated among those engaging in drug distribution. Almost every other segment of the U.S. population actually experience declining homicide rates during this time, including older Black males.

The Colombian experience also suggests a relationship between drug production and violence. The period of sharply increasing homicide in Figure 1 matches the time period in which the export market for cocaine was rapidly expanding and drug cartels were vying for control of the markets. The two departments of the country with the highest homicide rates are Valle and Antioquia, in which Cali and Medellin are respectively located. The homicide rates in these departments were four times higher than the median department over the 1990s. Furthermore, much of the drop in homicide since 1991 is due to reductions in Cali and Medellin, which have been attributed to the dismantling of the traditional drug cartels³⁴.

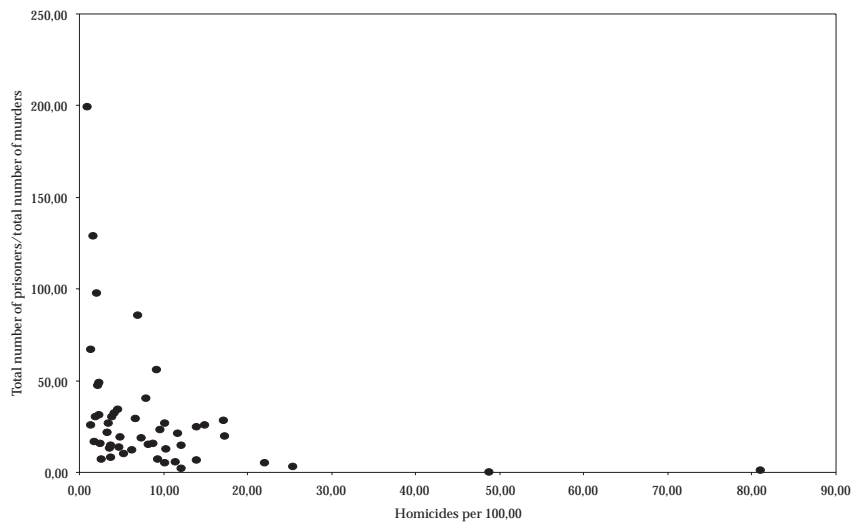
B. Lack of punishment of criminals

Punishing criminals by locking them up reduces crime in two ways. First, when criminals are behind bars, they are physically unable to commit crime. This is known as the "incapacitation" effect. Second, the threat of punishment may deter criminals from committing crime³⁵.

Using data from the United States, a series of studies have demonstrated a strong link between increases in punishment (including, but not limited to, increases in sentence severity (Kessler and Levitt 1998), higher arrest rates (Levitt 1997), and larger prison populations (Levitt 1996, Marvell and Moody 1994, Spelman 1994). The best estimates from this large literature suggest that a 10 percent increase in the expected punishment lowers crime by about two percent.

The poor quality of international data makes it somewhat difficult to construct reliable cross-country comparisons of expected punishments. In Figure 14, we provide a crude comparison along

Figure 14. Cross-Country Crime and Punishment: 1990-1994



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, Various Years.

³⁴ The evolution of violence in Bogotá is harder to explain. Even though public officials optimistically explain this fall with various "successful policies" that were undertaken from 1994, a careful time series analysis of weekly data suggests that this is not the case. See Paz Publica, "Homicidios en la Ciudad de Bogotá" forthcoming.

³⁵ This does not require that criminals are "rational," but rather merely that they respond to incentives. Decades of research by psychologists, sociologists, and economists demonstrate that people respond to incentives (as do rats, dogs, and pigeons).

these lines. We report the ratio of prisoners (for all crimes) to the number of homicides in a country, using the most recent data available for the country in question. Clearly, this measure of punishment is imperfect because most prisoners are incarcerated for crimes other than murder. Nonetheless, we hope that it captures to a first approximation the extent to which a country punishes its criminals. Figure 14 makes two important points. First, only countries with low punishment rates (the points to the left of the figure) have high crime. Colombia has both the highest homicide rates in the sample and the lowest punishment rate. Second, all high punishment nations (these include, among others, the United States, Singapore, England, Bermuda, and Madagascar) have low homicide rates.

It is instructive to compare Colombia to the United States, which has a high punishment rate, in order to understand why the expected punishments in these two countries differ so much. We present this analysis in Table 1. In the United States, an arrest is made and the defendant is brought to trial in 65 percent of murders, and a conviction occurs in more than half of all homicides. In Colombia, investigations are done in only 38 percent of homicides, and only 11 percent of homicides lead to trials. Convictions occur in less than seven percent of homicides in Colombia, only one-seventh the rate in the United States. Average sentence length for those convicted of murder in the United States is about twenty years, of which perhaps one-third of the time will actually be served. In Colombia, average sentence length is 14 years. Although we do not have good information on the fraction of the sentence actually served, we estimate that value to be one-third, which is probably an overstatement. Combining the information on probability of conviction with average time served yields the last column of the table, which is the expected time served behind bars per murder. In the United States, this number is 3.8 years, compared to 0.32 years -less than four months- in Colombia. Thus, effective punishment in Colombia is less than one-tenth of that in the United States. If one is a murderer, Colombia is a much better place to be.

We noted early in this section that the best empirical estimate of the responsiveness of crime to punishment is that a 10 percent increase in punishment lowers crime by 2 percent. If this estimate is correct, then raising Colombian punishment to United States levels (which are similar to most European countries), then we would predict Colombian crime rates might fall by more than 50 percent. That would mean eliminating over 10,000 murders annually in Colombia.

It is important to stress that at this point, we are not advocating any particular policy, but merely attempting to establish the factors that make Colombia an international outlier with respect to homicide. Before making policy recommendations, it is necessary to balance the benefits of greater punishment (lower crime) with the costs (the expense of catching criminals and locking them up, and any issues of civil liberty that may arise). There also may be important institutional barriers to effectively increasing punishment, such as corruption on the part of police and fiscales. In sections IV and V we return to these issues in much greater detail.

Table 1. Criminal Justice Treatment of Murderers in Colombia and the United States

	Probability of an investigation if murder occurs	Probability of an arrest and trial if a murder occurs	Probability conviction if a murder occurs	Expected time served if convicted of murder	Expected years in prison if I vommit a murder
Colombia	38	11	7	4.5 years	.32 years
United States	100	65	58	6.5 years	3.8 years

Notes: Values in the table are authors' estimates based on a variety of published data sources. For the United States, estimates are based on information published in Sourcebook of Criminal Justice Statistics, published annually by the Bureau of Justice Statistics. For Colombia, estimates are based on DANE - Estadísticas Judiciales and Consejo Superior de la Judicatura.

C. Guerrillas

An important difference between Colombia's crime problem and what is happening in the rest of Latin America is the prevalence of conflict, the increasing guerrilla/paramilitary presence, and their threatening activities.

The origin of Fuerzas Armadas Revolucionarias de Colombia (FARC) can be traced back to the period of La Violencia. The second major group, Ejército de Liberación Nacional (ELN), was created by a crew of students that came back from Cuba in the aftermath of Fidel Castro's revolution. From their beginning both groups had a slow but continuous growth. It was not until the mid 80s, after an aborted peace process, that their real strengthening began. From less than 2000 armed men at that time, by the end of the nineties they had reached almost 12000 active combatants (Figure 15). In terms of their regional influence, the number of municipios (out of 1075) with guerrilla presence went from a little more than a hundred in the late 80s to almost 600 in 1997.

The link between guerrillas, paramilitary, and other armed groups with crime can be analyzed from two dimensions. The first, and most straightforward, is through the performance of the criminal justice system: a weak judiciary stimulates both crime and the consolidation of armed groups or, the other way around, armed groups that weaken the judiciary indirectly stimulate other type of crime.

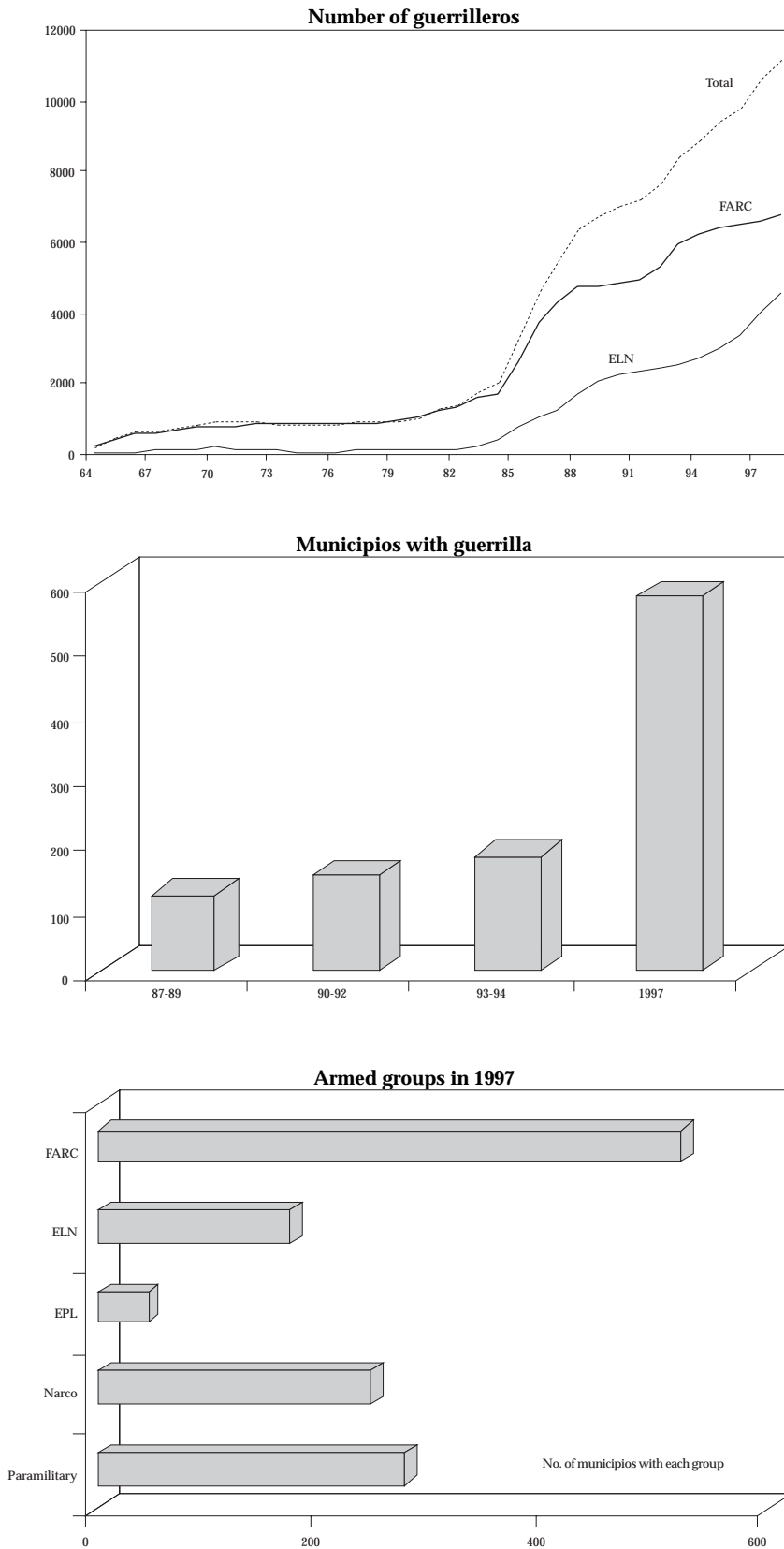
The second dimension comes from considering armed groups as suppliers of private protection services (see Gambetta 1993). In this sense, the association with violence, or crime, is rather complex. Successful protection providers need credibility, which means a stock of violence reputation. So it is clear that past violence is positively associated with armed groups. However, these groups may, eventually, reduce their effective use of violence and, more effectively, employ threats. On the other hand, high crime, and a poor judiciary, are good incentives for buying private protection services. Effective protection providers would tend to reduce crime, but not as much as to completely eliminate demand for their services. So, in theory, association between armed groups and crime, from third parties, is ambiguous. Third, if some armed groups engage in illegal production or trade activities with self-protection schemes, there may be as well some division of labor in illegal markets. Illegal producers may contract private protection services. In any event, illegal activities are always positively associated with the presence of armed groups. Last, private armies, may need to finance their military activities, and may also provide protection against themselves. This normally means high levels of kidnapping and extortion.

There is some evidence that, from their beginning, guerrilla groups provided protection against cattle theft in rural municipios (Rangel 1999). Rapid growth of ELN in the eighties is associated with extortion to oil companies. Most paramilitary groups, even a strong one financed by drug lords - known as M.A.S. "Muerte a Secuestradores: Death to Kidnappers"-, were created as a response to kidnapping by guerrillas (Thoumi 1994, Cubides 1999). There is an ample controversy in Colombia about the association between ordinary crime, or violence, and guerrillas (Echandia 1999).

During the 90s the empirical evidence on a link between homicide and guerrilla activity is very weak. Looking across municipios, areas with a guerrilla presence are no worse than other (using the 1997 assessment of the Inteligencia Militar as to guerrilla presence in a municipio. Moreover, Consejería para la Paz reports information about guerrilla presence in the period 1990-92. Municipios that did not have guerrillas in the early 1990s, but had guerrillas in 1997, actually see the greatest declines in homicide over the 1990s. Municipios that never have guerrillas, or municipios that had guerrillas both in the early 1990s and in 1997, see smaller declines in homicide.

A parallel analysis to that of the preceding paragraph can be made for kidnapping. It suggests a strong causal link between the kidnapping rate and the scope of guerrilla activity. The rise in the

Figure 15. Guerrilla and Armed Groups



number of active combatants and the spreading of guerrilla presence across municipalities is associated with a significant increase in criminal activities traditionally associated with guerrilla: terrorism and kidnapping.

Terrorist actions reported by the police have been steadily increasing since the eighties from less than 500 in 1985 to more than 1700 in 1997 (Figure 16). Reported kidnappings to the police show two periods of extraordinary rise. During the first rise, from 1986 to 1991, the kidnapping rate (per capita) grew at more than 40% a year. The second rise, from 1995 to the present, have seen kidnapping reports per capita grow at an annual rate of almost 25%³⁶.

Some further indicators corroborate the link between guerrillas and kidnapping. First, more than half of the kidnappings reported to the police between 1991 and 1999 are attributed by the victims to guerrilla groups³⁷. The other half of kidnappings were attributed to "common criminals"³⁸. It is not unusual, however, that this latter group would buy protection from or "sell" their hostages³⁹ to the guerrillas. Second, for the period 1991-1995 it has been estimated that kidnapping ransoms accounted for 22% of the guerrilla income⁴⁰. Average ransom paid within this period can be calculated at around US\$100.000⁴¹. In 1997 ransoms in the million-dollar range seemed to be frequent⁴². Third, criminal cases against kidnapers have been continuously falling since the early 80s. Arrest rates fell from 11% in 1980 to 2% in 1994 while conviction rates dropped from 4.4% in 1978 to 1.8% in 1994⁴³. On top of this, in prosecuting kidnapers there seems to be a bias of the criminal justice system against "common criminals" and in favor of guerrillas, and within the latter against low ranking agents in favor of group leaders⁴⁴. In 1996, while 43% of reported kidnappings were committed by guerrillas, only 29% of apprehended offenders belonged to these groups⁴⁵.

D. Poverty and Income Inequality

Among many leading Colombian thinkers the leading explanation for Colombia's crime problem is the country's poverty and low "social justice" (Comisión de Estudios Sobre la Violencia (1987)). Having analyzed the data, little evidence to support this view.

There is a large academic literature that studies the cross-country correlation between crime and poverty/inequality⁴⁶. There is no systematic evidence of a link between a country's poverty and its crime rate. Indeed, many studies find that richer countries experience more crime, although

³⁶ País Libre -a private non-profit organization that was set up by a former kidnapping victim in 1991 to support victims, gather information and lobby for legal reform against kidnapping- argues that the 1993-1995 drop in rates can partially be explained by a harsh anti-kidnap law that was approved in 1993. Although this legal initiative was almost dismantled by a Constitutional Court decision it might have had an effect on reporting rates.

³⁷ Paramilitary kidnapping apparently did not begin until 1998 and is still below 4% of the total figure. País Libre.

³⁸ The so-called "delincuencia común".

³⁹ Trujillo (1997).

⁴⁰ Echandía (1999) page 135.

⁴¹ Global figure in Echandía (1999) divided by average kidnapping reports for the same period.

⁴² Trujillo (1997) page 51.

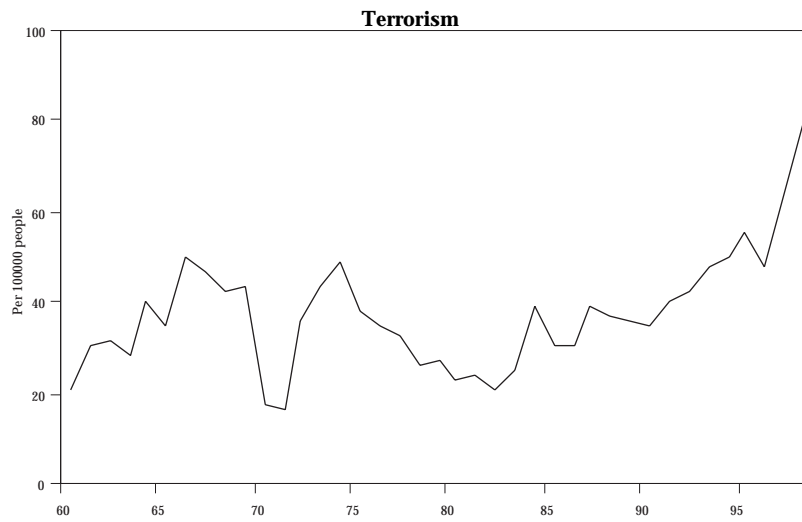
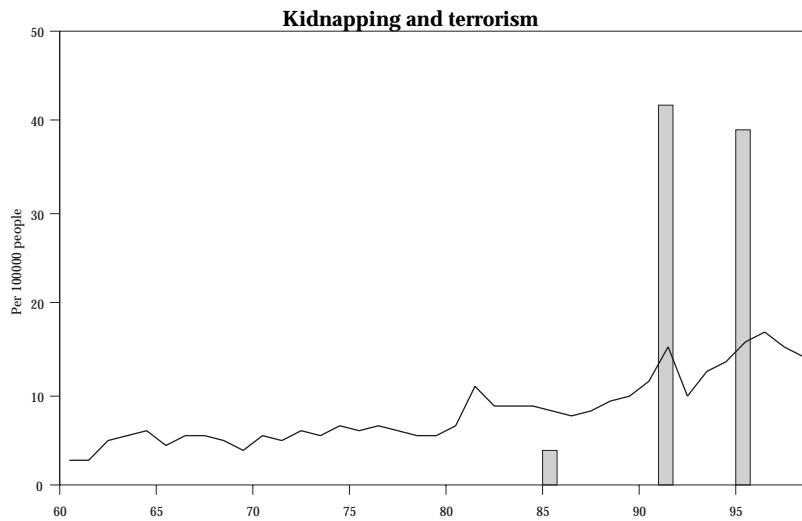
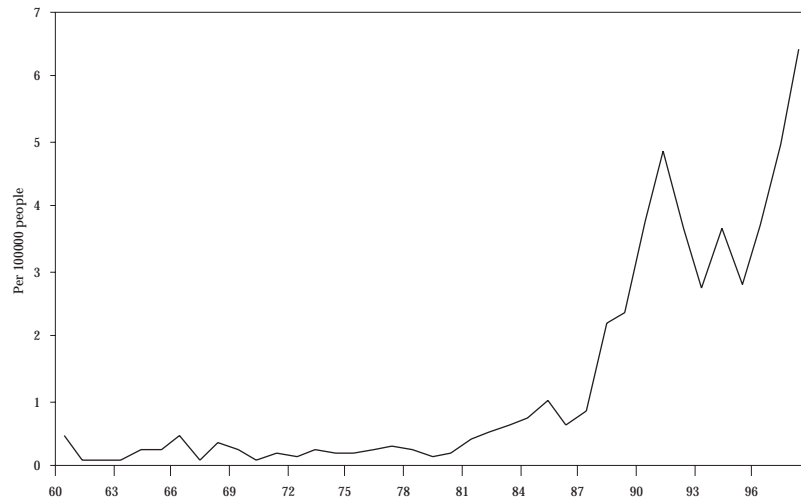
⁴³ Gómez (1996). See also Section 4.

⁴⁴ Santos (1997).

⁴⁵ País Libre.

⁴⁶ Fajnzylber et al (1999).

Figure 16. Kidnapping and Terrorism



Source: Policía Nacional, DANE-ENH.

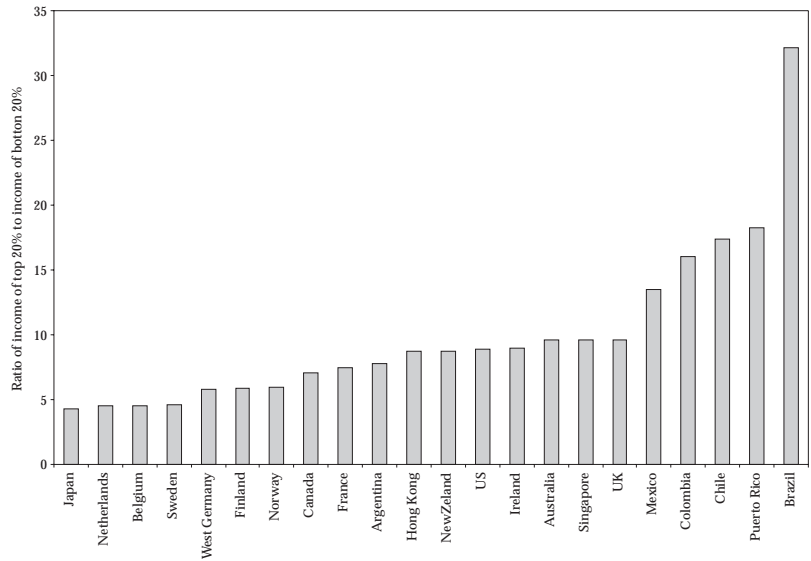
a recent paper by Soares (2000) suggests this surprising result is due only to more rigorous reporting of crime in rich countries - victimization surveys show no relationship whatsoever between a country's GDP per capita and crime.

Income inequality, on the other hand, does appear to be causally linked to crime in cross-country studies (Fajnzylber et al. 1998, Soares 2000)⁴⁷. Soares (2000) finds that increasing the ratio: (GDP of the top 20 percent/GDP of the bottom 20 percent) by one increases crime between five and ten, depending on the crime category.

It is important to note, however, that the income distribution in Colombia is not particularly unequal compared to other Latin American countries. Figure 17 presents the ratio of income in the top decile relative to the bottom decile in the income distribution for a range of countries. Colombia has substantial income inequality relative to many other countries, but income is more equally distributed than Brazil or Chile. Thus, while a high degree of income inequality may help to explain generally high crime rates in Latin America, it does not provide a reason why Colombian crime is so much higher than other Latin American countries

A comparison of Colombian municipios further calls into question poverty and income inequality as explanations for high crime rates. Figure 18 plots average homicide rates per capita over the period 1990-98 by municipio against the fraction of municipio's households that are below the poverty threshold for unmet basic needs according to the 1993 Census - DANE. Included in the figure is the fitted regression line summarizing the estimated relationship between the two variables. The data reveal no relationship: areas with high levels of poverty are actually less likely to experience high homicide rates than areas with a low incidence of poverty.

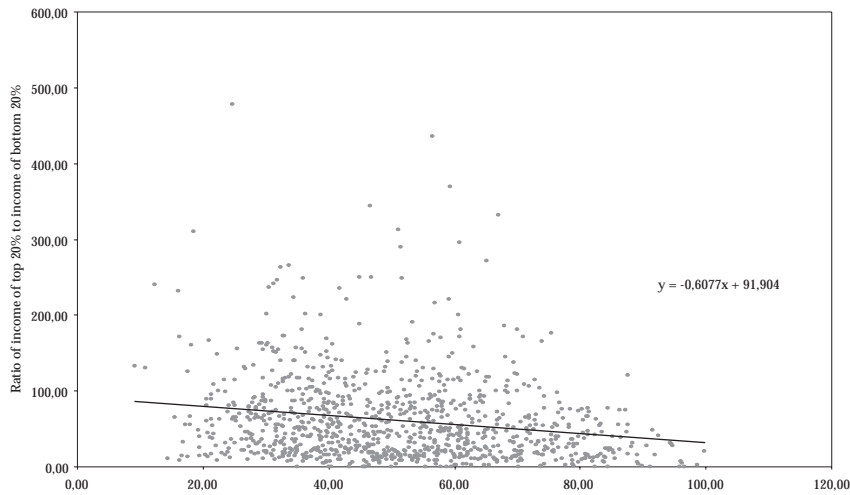
Figure 17. Cross-Country Inequality



Source: United Nations Development Programme.

⁴⁷ There are competing explanations as to why crime and inequality are linked. Sociologists suggest that exposure to the rich raises the aspirations of the poor, but when the poor's ability to achieve their materialistic aims, their frustration is manifested in criminal acts (cites). An alternative theory comes from evolutionary psychology. The essence of the argument is that competition for resources among young men becomes violent when there is also a lack of equilibrium in the mating market. Poor young men will kill fellow young men when competing for resources only if mating opportunities are scarce and the lack of resources can jeopardize reproductive success. (Daly and Wilson 1989). This type of reasoning also addresses one of the most general and well known facts about violence: strong and almost universal gender differences.

Figure 18. Poverty and Average Murder Rate: 1990-1998



Source: United Nations Development Programme.

Figure 19 is similar to Figure 18, but substitutes a measure of income inequality in a municipio (measured by a Gini index from 1993 Sarmiento (1998)). There is only a very weak relationship between income inequality and homicide across Colombian municipios.

From these various analyses, we are led to conclude that neither poverty nor income inequality can explain Colombia's high crime rate. While redistribution of income to the poor may be desirable for many reasons, lowering crime is certainly not foremost among these reasons.

E. Do Colombians have a unique propensity to violence?

Among many Colombian analysts, there is an idea that Colombia's long history of violence (Gaitan 1994; Monetengro y Posada 1995 review the literature about how Colombians have become inherently more violent than residents of other countries. It is also argued that most violence in Colombia is not drug or conflict related, but rather comes from generalized violence among ordinary citizens (Comisión de Estudios Sobre la Violencia (1987))

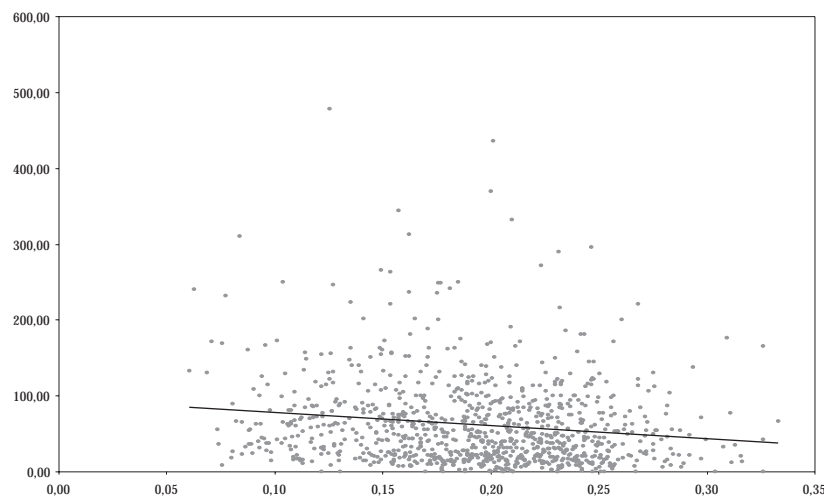
We offer two different kinds of evidence against this conjecture. First, crime in Bogota is similar to that of Rio de Janeiro, Sao Paulo, Caracas, San Salvador, Guatemala City⁴⁸). Our second counter-argument is that for other manifestations of violence, that are unrelated to the drug trade, Colombia is not an outlier, or the situation did not get worse during the 80s, when homicide rates significantly rose. In terms of domestic violence, for example, Colombia looks quite similar to Chile, or Costa Rica and falls behind Perú, Nicaragua or Mexico (Buvinic and Morrison (1999)). Thus there is little need for a claim that Colombians are simply more violent than others by nature.

F. Summary

In this section, we explored the leading explanations as to why crime (in particular murder) is so high in Colombia. Our conclusion is that the drug trade and the low-levels of punishment of criminals,

⁴⁸ Mexico City is unusually low, less than 20.

Figure 19. Inequality and Average Murder Rate: 1990-1998



Source: Sarmiento (1993), Consejería para la Paz, Policía Nacional.

together, are important contributors to the gap between Colombia and other countries. The role of guerrillas is less clear: there is no obvious link between guerrilla activity and homicide, but there does appear to be a strong impact of guerrillas on kidnapping. Economic factors of poverty and income inequality, and the hypothesis that Colombians are simply more violent by nature, do not appear to us to be central explanations of the crime phenomenon.

IV. The Colombian Criminal Justice System

The analysis of the preceding section suggests that the absence of an effective Colombian criminal justice system is a major contributor to Colombia's crime problem. While by no means the only cause of high crime rates, we feel that reforming the criminal justice system is the most direct and feasible way to lessen the burden of crime felt by Colombian citizens in the short run. In this section, we document each step of the criminal justice process, providing empirical evidence wherever possible. We attempt to isolate the steps in the process where the greatest breakdowns occur. In section V of the paper, where we make policy recommendations, many of our suggestions will relate to reforming the criminal justice system to remove these bottlenecks.

A. Reporting Crime to the Police

The first step in the process is the willingness of victims to come forward and report crimes to the police. Without this action, there is no hope that a crime can be solved and a criminal be brought to justice, except through vigilanteism. As noted earlier, Colombian reporting rates are not unusual for a Latin American country (Alvazzi 1998).

We also noted earlier that there is a large and growing discrepancy between crimes that citizens say they reported and those crimes officially recorded by the police. The number of crimes which citizens say they reported to the police rose substantially between 1985 and 1995, from 941 to 1,296 per 100,000. Official police records, however, show fewer crimes (661 per 100,000 in 1985) than citizens say they report. Moreover, the official data actually shows a ten percent *decline* in crime between 1985 and 1994.

There appears to be little relationship between official police records and either victimization, or citizen claims of reported crime. Police records include less than half of the crimes that citizens claim to have reported. The discrepancy between official data and victimization data - in both the levels and trends - causes us great concern as to the reliability of the official data. In fact, as we argue below, beginning in the mid-1970s, official crime statistics do not only reflect crime, but also, a propensity to not record crimes unless an offender was identified, making these data useless for tracking crime trends

B. Criminal Investigations

Once a crime is reported, the first step to solving a case is an investigation. In Colombian data, there are two types of investigations: preliminary and sumario. Police conduct the preliminary investigations, which involve basic fact checking in cases where no offender is identified. Fiscales - powerful prosecutors - are in control of sumarios which involve preparation for bringing a case to trial. Figure 20 presents the fraction of reported crimes in which an investigation is conducted and the fraction of those investigations that result in a trial, by type of crime in 1995. In cases involving homicide and personal injury, roughly 40 percent of cases are investigated. For property crime, roughly the same proportions hold. For kidnapping, investigations are slightly less frequent. Across all three crime categories, the percentage of investigations that lead to a trial is similar: about 30 percent. The results in the figure are both surprising and disturbing. It is surprising that the fraction of cases investigated and the fraction of successful investigations (i.e. investigations resulting in a trial) is similar across crime categories as different as homicide and personal injuries, kidnapping, and property crime. In most countries, investigations are much more likely in serious crimes such as kidnapping and murder than in property crime. Moreover, the rate of solving crimes in other countries such as the United States is proportional to the seriousness of the offense. For instance, in the United States, roughly 65 percent of murderers are brought to trial (or plead guilty prior to a trial), whereas for burglaries reported to the police, the same percentage is less than 10 percent. But in Colombia, the percentage of reported crimes that eventually lead to a trial is between 10 and 15 percent across all of the crime categories, suggesting that a great deal of effort is devoted to solving minor crimes in Colombia while the more serious and socially costly crimes go unpunished⁴⁹. The roots of this investigative crisis go back many decades. Beginning in the 1940s when official data first became available, the number of "sumarios" or formal investigations grew by 6-7 percent per year (see Figure 21). In contrast, however, Table 2 shows that the number of cases actually appearing before judges rose only 1-2 percent annually. Consequently, a huge and growing backlog of unsolved cases emerged. In response, a specialized judge (juez de instruccion) was first introduced in 1971. Their priority was to solve the backlog problem, rather than to fight crime per se. In the decade following their introduction, the number of sumarios rose from 35,000 annually to 300,000. Yet, this increase in investigations appears to have been at the expense of toughness. In 1971, almost 30 percent of sumarios went to trial, but by 1981 the proportion had fallen to only 9 percent. The introduction of the jueces de instruccion institutionalized the policy that persists to this day: hopelessly overloaded, the criminal justice system focuses

⁴⁹ An alternative explanation for this pattern is that minor crimes are simply not officially recorded in many cases if a suspect is not identified, so that the reported crimes dramatically understate the true number of crimes. Under this interpretation, it is not that the fiscales spend too much time investigating minor crimes, but rather, that they are equally ineffective in solving both violent and property crime.

Figure 20. Congestion 1940-1964

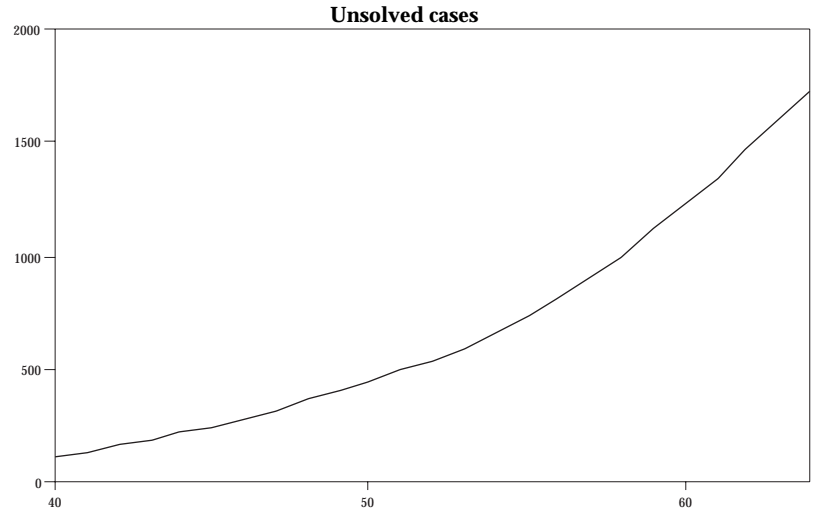
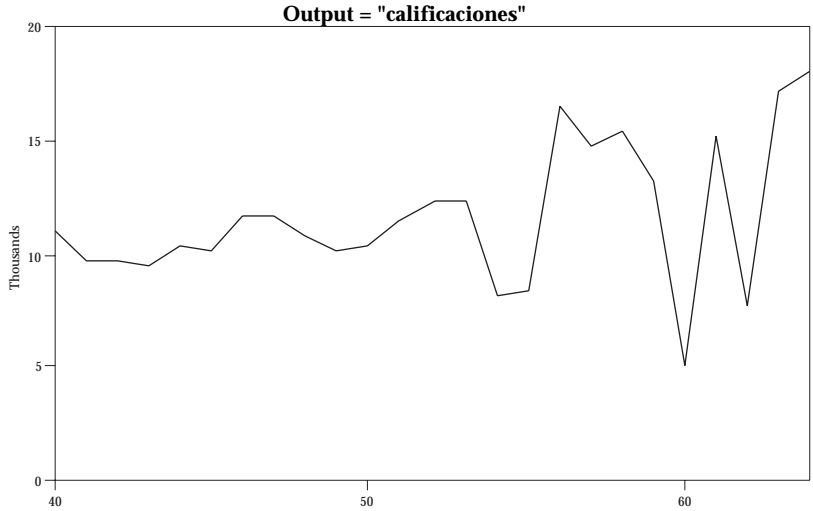
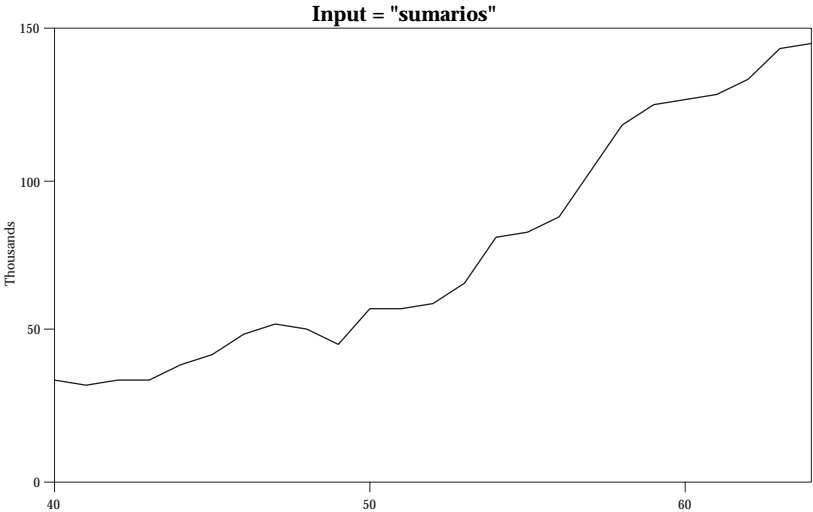
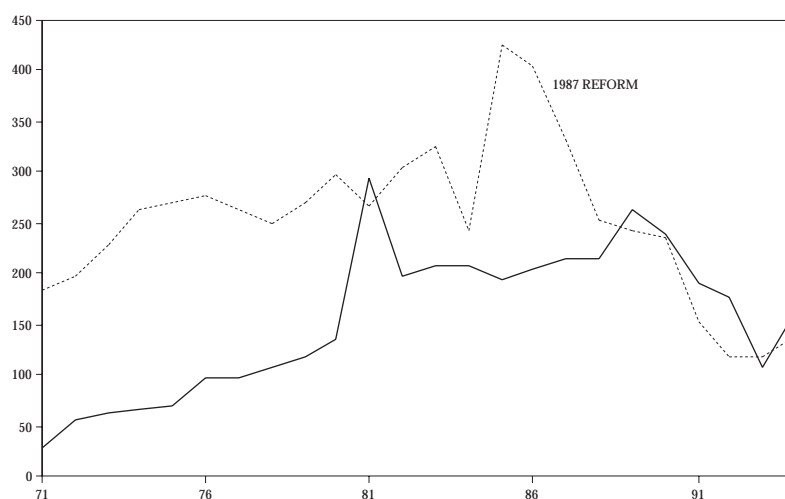


Figure 21. Efforts against congestion from 1971



its meager resources on crimes that are easily solved, even if such crimes are minor and murderers and kidnapers go free. Furthermore, a legislative decree adopted in 1987 virtually ensures that difficult cases will not be solved. In response to the crime backlog, it was legislated that a sumario only be initiated if the offender was identified, and if after 60 days of the crime the offender is not identified, then the case is closed. In essence, the law said that fiscales can only investigate those crimes in which there is little need for investigation! Although this time limit was formally eliminated by Ley 81 of 1993, this approach to investigation continues to be prevalent. In the most recent data, 90 percent of the investigations are concluded within two months. Thus, the fiscales have proved to be quite efficient in carrying out the tasks that they have historically been pressured into focusing on, although in our opinion these are not the activities which have the greatest social benefits.

The final stage of the criminal justice system is the trial, sentencing, and punishment of criminals. Of cases that go to trial or for which there is "sentencia anticipada" (a plea bargain), guilty sentences are obtained roughly 90 percent of the time overall, and 76 percent of the time for homicide. Thus, the primary bottleneck in achieving more convictions does not appear to lie with the judiciary, but rather, with the fiscalia bringing only a limited number of cases.

Once convictions occur, the sentences handed down by the courts are in line with sentences in other countries. For instance, as noted earlier, the average sentence for a convicted murderer in Co-

Table 2. Judiciary Performance 1995

	All crimes	Roportunity	Homicide and injuries	Sexual assault	Kidnapping	Other
Crime	100,0	100,0	100,0	100,0	100,0	100,0
Reports	14,9	7,4	96,8	27,7	21,7	76,5
Investigation	9,9	3,3	37,9	57,3	8,6	178,8
Trials	2,8	1,0	11,2	17,2	2,5	49,8
Sentences	1,7	0,6	6,8	10,4	1,5	30,2

Policía Nacional - DANE: ENH and Estadísticas de Justicia.

Colombia is 14 years (although there is enormous variation in this number: 25 percent of convicted killers got 2 years or less, and 25 percent got 25 years or more.

Although we do not have reliable information on the actual time served, it is much less than the sentence handed down by courts. As in other countries, sentences are reduced for good behavior in prison. In addition, it is estimated that approximately two percent of prisoners escape every year⁵⁰.

A high rate of prison escapes is just one dimension along which the Colombian prison system performs poorly. There are currently 40,000 prisoners in Colombia, held in facilities designed to hold only 28,000 inmates. This overcrowding no doubt contributes to prisoner escapes, as well as to violent conditions within the prisons. On average, 150 prisoners are killed in prison each year - in Bogota earlier this year 23 prisoners died on a single day in one prison. Some of this prison violence is attributable to conflicts between paramilitaries and guerrillas housed within the same prisons. Moreover, it is claimed that crime, especially kidnapping, is actually done by prison inmates who bribe guards in order to temporarily leave the prison grounds to conduct their crimes.

V. Recommendations

In this chapter, we have attempted to provide a careful analysis of Colombia's crime situation, as well as the reasons why Colombia suffers a level of violence that is among the highest in the world. We conclude the chapter with a series of recommendations for policy makers in Colombia. Although we have given some thought to political feasibility in crafting our suggestions, effectiveness - not politics - is the primary factor that has determined our recommendations. Consequently, some of our ideas may be difficult to implement in the current political environment. Nonetheless, we feel it is useful for these politically challenging policies to be added to the public debate. We have, however, limited ourselves for the most part to policy changes that do not require changes to the existing Constitution.

Our policy recommendations are divided into four categories: information/statistics, lessening corruption in the criminal justice system, micro-priorities, and macro-priorities. For each category, we provide a brief overview of the rationale underlying the suggestions, and then present specific policy recommendations in a bullet-point format.

A. Information/Statistics

Our first set of recommendations has little to do with the direct activities of fighting crime. Rather, it is our belief that access to better statistics and information on crime and criminal justice would be useful to policy makers. These first suggestions are generally not particularly expensive to implement and are unlikely to be as politically charged as our later recommendations.

Specific recommendations:

- As police reports show, when an agency is evaluated using its own reports there is a high risk of a low quality statistical output. We suggest that reporting/statistical duties be taken away from the agencies involved in the criminal procedures. This will include (1) not only the Police, but also (2) the Fiscalia, (3) the Juzgados and (4) the Prisons. In fact, with the creation of Fiscalia,

⁵⁰ For purposes of comparison, approximately 1 in 1000 prisoners escapes each year from United States prisons, and virtually all of these escapes are from low or minimum security facilities.

and of the Consejo Superior de la Judicatura (The Administrative branch of the Judiciary) official figures got worse than they were when Judiciary Statistics were under the sole responsibility of DANE.

- Homicide statistics, which are currently of relatively high quality, should be "protected" because they may also deteriorate. The statistical duties of Medicina Legal should be broadened to cover all municipios and be separated from judicial investigations
- Based on the existing academic research which points out that reported crime rates are not reliable indicators of underlying crime victimization, we recommend the creation of a regular (every 3 years) victimization survey representing the whole country, not just some urban areas. Especially important in these victimization surveys is detailed information about the influence of armed groups and drug cartels in the crimes that are occurring.
- Much more information is needed about prisons. It is currently not possible to accurately determine the composition of the prisons by type of crime committed or the actual time served by inmates. We suggest that a prison census be conducted every three years. This census will help policy makers understand how prison resources are being allocated (e.g. between violent and non-violent offenders). Such a census will also provide the basis for determining how much prison capacity is required to house the existing and projected prisoner population.

B. Corruption of Agencies

It is clear that corruption and/or intimidation on the part of drug cartels and armed groups currently interferes with effective enforcement of the law. While recognizing the difficulties involved with reducing such corruption, we nonetheless feel that the benefits of doing so are so immense that an investment in this area is likely to prove extremely cost-effective. Reductions in corruption among the police in recent years provide an excellent example of how successful such programs can be.

Specific recommendations:

- An externally supervised corruption/infiltration investigation in the Fiscalía. Since the Fiscalia are the critical link in bringing criminals to justice, progress in fighting crime cannot be made until improvements are seen here. Moreover, this is a basic preliminary step for reducing what, for some people, looks like a fiscalia-military confrontation. The legitimacy of Fiscalia is also crucial for making progress investigating human rights issues.
- Anti-corruption investigation/purge of the military like there was of the police a few years ago. Some external supervision would also be useful. Any links between military and paramilitary or narcos have to be left behind if some progress is to be made against guerrillas. For investigating paramilitary activity Fiscalia has recently said that it felt unsafe. This is another issue for which coordination between non corrupt fiscales and non corrupt military is important.

C. Micro-priorities

By micro-priorities, we mean legal or institutional changes that can be quickly implemented or done on a small scale that may nonetheless have an enormous impact on the safety and well-being of Colombians. These recommendations are likely to provide the greatest benefits relative to their costs of the various suggestions that we make. Thus, we feel that these may be the most important recommendations we make.

Specific recommendations:

- The establishment of a separate anti-kidnapping task force. This task force would be made up of an elite group of fiscales who have proven themselves effective and non-corrupt. This group would devote 100 percent of their attention to investigating kidnapping incidents. Our estimate is that less than 100 dedicated fiscales could dramatically reduce kidnapping in a short amount of time. Such a program in Brazil has already been proven very effective.
- The establishment of an elite anti-homicide task force, similar to that proposed for kidnapping. This task force would be charged with carrying out a serious investigation of every homicide that occurs. If the task force contained 1,000 fiscales, then there would be roughly 20 cases annually for each fiscal to investigate.
- Kidnapping and homicide task forces, whatever their size, should be completely isolated from congestion in other areas.
- Establish mandatory sentences to lessen the scope for corruption of judges and also to lessen the ability of judges to be intimidated by narcos or guerrillas.
- The safety of judges and prosecutors must be guaranteed. An unacceptable number of judges and prosecutors are murdered in Colombia. We recommend that the government provide twenty-four hour a day protection to judges and prosecutors working on cases dealing with narcos or guerrillas.
- Violent crime, especially murder and kidnapping, should receive an increased share of the police, fiscalia, and prison resources, even if this means devoting less resources to property crime. The social costs of violent crime far outweigh those of property crime.
- A substantial increase in Colombia's prison capacity. It would not be unreasonable to build enough prison cells to hold 100,000 prisoners (compared to the current prison capacity of 28,000, and actual prison population of 40,000). Even with a prison population of 100,000, the number of prisoners per crime committed will still be very low by international and even South American standards.
- Steps must be taken to put the government — not the prisoners — in control of the prisons. This will have two impacts: the first is to safeguard the human rights of prisoners, the second is to safeguard the citizens outside prisons from frequent escapes.
- Prisoners should be separated according to the seriousness of the crimes. Especially, guerrilla and paramilitary should be separated from the rest of the prisoners to avoid the spreading of conflict within prisons.

D. Macro-priorities

Unlike the micro-priorities described above, our last set of recommendations relates to fundamental political issues, rather than to easily implemented stand-alone policy recommendations.

Specific recommendations:

- Take the political decision to fight kidnapping/extortion, even from guerrillas. We would go as far as to recommend giving some tax money to guerrillas to replace what they are getting from kidnapping activities. This has already been discussed with ELN. This will have the dual advantages of lessening kidnapping and lowering the incentives for new paramilitary activity. Most importantly, this would define kidnapping fighting as a public issue and undermine the private protection schemes (with both paramilitary and guerrilla).

- From reading Plan Colombia it appears that kidnapping, which we consider one of the most important issues, has not been defined as a priority. The only references to kidnapping in Plan Colombia call for social participation and political pressure on guerrillas to end this practice. Clearly, this is not sound criminal policy.
- Plan Colombia intends to invest a great deal of resources in high conflict areas. What we would recommend instead, is that resources should be channeled to very poor, but non-violent regions. By distributing resources to non-violent areas, this eliminates the perverse incentives of formerly non-violent areas attracting guerrillas. Moreover, this encourages local authorities to aggressively fight crime to protect the flow of funds from the central government. (There is an historical argument in favor of this. In XIII century England high crime areas were taxed more heavily than low crime areas. Also, an incentive to investigate homicides was that the crown got the murderers property) .
- Drug policy should focus on trading, money laundering and prosecuting drug lords, not farmers. There are many, and strong arguments against fumigation of coca plantations, and public opinion opponents to this can be found all over the political spectrum.

REFERENCES

- Alvazzi del Frate, Anna (1998), *Victims of Crime in the Developing World*. UNICRI. Roma: Publication No 57.
- Bejarano, Jesús Antonio (1996), "Inseguridad y violencia: sus efectos económicos en el sector agropecuario". *Revista Nacional de Agricultura*, Nos 914-915.
- Bejarano, Jesús Antonio (1988), "Efectos de la violencia en la producción agropecuaria", *Coyuntura Económica*, Vol XVIII, Septiembre.
- Bohadilla, José Luis; Víctor Cárdenas; Bernardo Coutolenc; Rodrigo Guerrero y María Antonia Remenyi (1995), "Medición de los costos de la Violencia". OPS.
- Bonell Andrés, Pedro Gómez y Fernando Moreno (1996), "Efectos del aumento en la criminalidad sobre la inversión industrial en Colombia" Trabajo de Grado no publicado, Bogotá: Universidad Javeriana.
- Buvinic, Mayra y Andrew Morrison (1999), *Notas Técnicas. Prevención de la Violencia*. Washington: BID.
- Chica, Ricardo (1996), "El Crecimiento de la Productividad en Colombia - Resumen de los resultados del Estudio Nacional sobre Determinantes del Crecimiento de la Productividad", Bogotá: DNP, Colciencias, DANE.
- Conferencia Episcopal de Colombia (1995), *Derechos Humanos. Desplazados por Violencia en Colombia*. Bogotá, Conferencia Episcopal.
- Comisión de estudios sobre la violencia (1987), *Colombia : Violencia y Democracia*, Bogotá : IEPRI, Universidad Nacional, Colciencias. 4a Edición.
- Corbo, Vittorio (1996), "Modelo de crecimiento para América Latina", Bogotá, Seminario CEDE.
- Corporación Región (1997), "Una aproximación a la Conflictividad Urbana en Medellín", Medellín, Mimeo.
- Cubides, Fernando (1999), "Los paramilitares y su estrategia", Deas y Llorente (1999).
- Cuéllar de Martínez, María Mercedes (1997), "Valores y Capital Social en Colombia". Bogotá, Corporación Porvenir y Universidad Externado de Colombia.
- Daly, Martin and Margo Wilson (1988), *Homicide*. Aldine de Gruyter.
- Deas, Malcolm y María Victoria Llorente (1999), Comp. *Reconocer la Guerra para Construir la Paz*. Bogotá, Uniandes, CEREC, Norma.
- Defensoría del Pueblo (1996), "El conflicto armado en Colombia y los menores de edad". Boletín No 2, Bogotá.
- Echandía, Camiilo (1999), "Expansión territorial de las guerrillas colombianas". Deas y Llorente (1999).
- Escobar, Santiago (1994), "Estudio del impacto de la violencia en la producción agropecuaria". Documento de Trabajo. Bogotá: Oficina del Alto Comisionado para la Paz. Observatorio de violencia.
- Fajnzylber Pablo, Daniel Lederman and Norman Loayza (1998), *Determinants of Crime Rates in Latin America and the World. An Empirical Assesment*. Washington: World Bank Latin America and Caribbean Studies.
- Gaitán, Fernando (1994), "Un ensayo sobre la violencia en Colombia" en Deas, Malcolm y Fernando Gaitán (1994), *Dos Ensayos Especulativos sobre la Violencia en Colombia*, Bogotá : Tercer Mundo.
- Gambetta, Diego (1993), *The Sicilian Mafia : The Business of Private Protection*, Cambridge MA : Harvard University Press.
- Gaviria, Alejandro and Carmen Pagés (1999), "Patterns of Crime Victimization in Latin America". Washington: IADB. Mimeo
- Giraldo, Carlos Alberto; Jesús Abad Colorado y Diego Pérez (1997), *Relatos e Imágenes. El desplazamiento en Colombia*. Bogotá, CINEP.
- Gómez, Olga (1996), "Causas Económicas del Secuestro en Colombia". Departamento de Economía - Universidad Javeriana, Bogotá.
- IEPRI (1997), "La paz es rentable. Balance de los Estudios". Proyecto de consultoría al DNP.
- INS.CELADE (1991), "Accidentes y muertes violentas en Colombia. Un estudio sobre las características y consecuencias demográficas 1965-1988". San José, Costa Rica.

- Jaramillo, Ana María (1993), "Milicias Populares en Medellín, entre lo privado y lo público". Revista Foro No 22, Noviembre.
- Jaramillo, Ana María (1994), "Entre la Guerra y la Paz". Palabras Más, Corproación Región, Medellín.
- Kennedy, David, Anne Piehl, and Anthony Braga (1996), "Youth Violence in Boston: Gun Markets, Serious Youth Offenders, and a Use_Reduction Strategy," *Law and Contemporary Problems* LIX, 147_183.
- Kessler, Daniel, and Steven Levitt (1999), "Using Sentence Enhancements to Distinguish between Deterrence and Incapacitation". *Journal of Law and Economics* 17(April): 343-364.
- Knaul, Felicia (1997), "The importance of family and community social capital in the creation of human capital in urban Colombia". Bogotá: LACEA.
- Leal, Francisco (1994), "Defensa y Seguridad Nacional, 1958-1993" en Leal, Francisco y Juan Tokatlián, Comp (1994). *Orden Mundial y seguridad. Nuevos desafíos para Colombia y América Latina*. Bogotá, IEPRI-SID-FESCOL.
- Levitt, Steven (1997), "Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime". *American Economic Review*, 87(3):270-290.
- Levitt, Steven, and Sudhir Venkatesh (2000), "An Economic Analysis of a Drug-Selling Gangs Finances", Forthcoming, *Quarterly Journal of Economics*.
- Londoño, Juan Luis (1998), "Epidemiología económica de la Violencia". Ponencia ante la Asamblea del BID. Cartagena.
- Marvell, Thomas, and Carlisle Moody, (1994), "Prison Population Growth and Crime Reduction", *Journal of Quantitative Criminology* 10:109-140.
- Ministerio de Salud (1995), "Evaluación de la demanad de atención y costos ocasionados por las lesiones de causa externa en un hospital de Bucaramanga, entre el 1 de Enero y el 31 de Diciembre de 1994". Mimeo
- Montenegro, Armando y Carlos Esteban Posada (1995), "Criminalidad en Colombia", *Coyuntura Económica* Vol XXV N° 1.
- Morrison, Andrew y Miguel Pérez (1994), "Elites, guerrillas and narcotraficantes: violence and internal migration in Colombia". *Canadian Journal of Latin American and Caribbean Studies*, Vol 19 No 37-38.
- Murillo, Gabriel y Marta Herrera (1991), *Violence and migration in Colombia*. Washington : Center for Immigration Policy and Refugee Assistance, Gerogetown University,.
- Ospina, Paula (1996), "Gasto Público y Privado en Seguridad" Trabajo de Grado no publicado Universidad Javeriana, Bogotá
- Parra, Clara Elena (1997), "Determinantes de la Inversión en Colombia : Nueva evidencia sobre el Capital Humano y la Violencia". Bogotá : Programa de Economía para Graduados, Universidad de los Andes.
- Plazas, Alfonso (1997), "Impacto de la violencia sobre la productividad departamental en Colombia". Bogotá, Universidad Javeriana, Departamento de Economía.
- Rangel, Alfredo (1999), "Las FRAC-EP una mirada actual". Deas, Malcolm y María Victoria Llorente (1999).
- Rocha, Ricardo (1997), "Aspectos Económicos de las Drogas Ilegales" in PNUD-DNE (1997), *Drogas ilícitas en Colombia. Su impacto económico, político y social*. Bogotá: Ariel Ciencia Política.
- Romero, Giovanni (1997), "Demografía de la Violencia en Colombia". Mimeo. Bogotá: Universidad de los Andes- CCRP.
- Rubio, Mauricio (1995), "Crimen y Crecimiento en Colombia" *Coyuntura Económica* Vol XXV N°1.
- Rubio, Mauricio (1996), "Inseguridad y Conflicto en las ciudades colombianas" Documento CEDE No. 96-09, Bogotá, Universidad de los Andes.
- Rubio, Mauricio (1997), "Percepciones Ciudadanas sobre la Justicia - Informe final de Investigación" Bogotá, Ministerio de Justicia, Cijus-Universidad de Los Andes.
- Rubio, Mauricio (1999), *Crimen e Impunidad. Precisiones sobre la Violencia*. Bogotá, CEDE-Tercer Mundo.
- Salazar, Alonso (1994), *No Nacimos pa Semilla*. Bogotá, CINEP.
- Salazar Alonso y Ana María Jaramillo (1992), *Las Subculturas del Narcotráfico*. Bogotá: CINEP.
- Sánchez Fabio, Jorge Iván Nuñez y Jairo Nuñez (1996), "Evolución y determinantes de la productividad en Colombia: Un análisis global y sectorial» Archivos de Macroeconomía - DNP UAM.

- Santos, Francisco (1997), *Legislación anti-secuestro. Qué sirve y que no*. Memorias Seminario Internacional de Violencia, Secuestro y Terrorismo. Bogotá: Universidad de Los Andes.
- Sarmiento, Alfredo (1998), "La Violencia y las variables sociales" en DNP (1998), *La Paz: El desafío para el desarrollo*. Bogotá, TM Editores, Departamento Nacional de Planeación.
- Soares, Rodrigo (2000), "Development, Crime and Punishment: Accounting for the International Differences in Crime Rates". Dept of Economics - University of Chicago. Mimeo.
- Spelman, William (1994), *Criminal Incapacitation*, New York, Plenum.
- Steiner, Roberto (1998), "Colombia's Income from the Drug Trade", *World Development*, vol. 26, no. 6, pp. 1013-1031.
- Thoumi, Francisco (1990), "Algunas implicaciones del crecimiento de la economía subterránea en Colombia" in Tokatlián, Juan y Bruce Bagley (1990). *Economía y Política del Narcotráfico*. Bogotá: Ediciones Uniandes-CEREC pags 87-107.
- Thoumi, Francisco (1994), *Economía Política y Narcotráfico*. Bogotá, Tercer Mundo.
- Trujillo, Isaias (1997), "Secuestro y Violencia en Colombia". Memorias Seminario Internacional de Violencia, Secuestro y Terrorismo. Bogotá, Universidad de Los Andes.
- Trujillo, Edgar y Martha Badel (1998), "Los costos económicos de la criminalidad y la violencia en Colombia: 1991-1996". Documento No 76, Archivos de Macroeconomía, Bogotá, DNP.

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