

## Comments

**Peter Reuter and John Roman:** The extraordinary economic growth that has occurred in much of the world over the last twenty years has been accompanied by a surge in measured crime in many of the more rapidly growing countries.<sup>1</sup> Rising wealth, even improved education, appear not to have suppressed crime. This has generated a certain amount of pop sociology, such as references to cities as breeding grounds for crime and the growth of anomie in industrial and post-industrial societies, but only a modest amount of systematic research. The connection between the multi-dimensional development process and crime is one of considerable scientific and policy interest.

The original contribution of the paper by Fajnzylber, Lederman, and Loayza has two components. First, they attempt to validate the basic economic model of crime by showing that it can account for the variation in aggregate crime rates across countries and over time in a parsimonious fashion. Second, they use the results of their empirical work to develop policy conclusions. Their results generate a number of interesting observations, most notably that there are long crime waves, such that changes in economic factors may take decades to fully play out.

We argue that the analysis produces a number of implausible results, however, in large part because of the approach chosen rather than any detail of its execution. The problems of data quality and construct validity that bedevil cross-national studies of such poorly measured social phenomena as crime may be insoluble. On the policy side, the finding that economic growth rates and inequality explain violent crime is of limited utility: it is a priori difficult to envision a nation not seeking growth and income equality regardless of their effect on crime. Furthermore, the authors' conclusions with regard to drug policy do not follow from the paper's findings.

1. Shawn Bushway provided helpful comments for the discussion below.

*The Analysis*

Fajnzylber, Lederman, and Loayza present a wide array of analyses on the relation between crime and economic conditions, but their core contribution is easily described. They estimate a single equation in which the dependent variable is either homicide or robbery (both proxies for violent crimes generally) and the explanatory variables, in addition to the lagged dependent variable, are primarily economic: average income, income growth, average education, and income inequality. These are described as “the basic economic determinants of violent crime rates.” The data consist of five-year averages over a twenty-five-year period for between thirty-five and forty-five nations (depending on the specification). The authors then sequentially introduce a series of other independent variables: two deterrence measures, an indicator of illicit drug production, an indicator of drug use, two demographic factors, and more refined measures of inequality. Finally, they add six social capital measures to a stripped-down version of the basic model.

The only variables with consistently significant coefficients in these equations are GDP change, the Gini coefficient, and lagged crime (homicide or robbery). For every other variable the coefficient is either non-significant, has the wrong sign, or changes signs in different specifications. The estimation technique, namely, the generalized method of moments (GMM), does not allow any measure of goodness of fit.

The coefficient estimates suggest that changes in growth rates and income inequality have surprisingly large effects on robbery. Controlling for inertial effects, in the short run a 1 percentage point increase in the GDP growth rate would yield a 13.7 percent decline in robbery. Therefore, an increase in the growth rate from 2 percent to 6 percent would halve robberies sustained over a five-year period (the time unit of observation in the paper), and a similar decrease in growth would increase robberies by more than half. For the Gini coefficient, which ranges from 35 to 55 in the authors’ data set, the long-term effect of an increase of one point is about 11 percent; quite modest reductions in income inequality would appear to have very substantial effects on the crime rate.

Omitted variables or other specification errors may explain these seemingly incongruous results. The consistency of signs for income growth and inequality hides apparently large variations in size. Again consider the GDP growth coefficient in table 2 for homicide. With the WHO data, that

coefficient is  $-0.0115$ ; using the UN homicide data, the coefficient is almost twice as large in the same specification, at  $-0.0239$ . The inequality coefficient quadruples when the two versions are compared, though they both claim to be essentially the same measure

Other variables with a strong theoretical base are all rejected because they do not consistently have significant coefficients with the predicted sign. Yet there is abundant evidence that in cross-state or individual-level analyses they have substantial effects. For example, in a number of studies, the fraction of young males in the population turns out to have a substantial, statistically significant effect on various measures of crime.<sup>2</sup>

### *Interpreting the Findings*

The decision to commit crime involves weighing the returns to legitimate and illegitimate work. Rising wages should reduce crime, but of course wages also affect other relevant variables, including the return to criminal activity since rising wages will generate more wealth and thus more attractive targets. Testing at the microeconomic level has required careful development of proxies for these other effects.

At the aggregate level of this paper, we are left with explanatory variables that have many possible interpretations. Criminologists have developed a number of competing theories, in which income growth and inequality may play roles but through quite different mechanisms. For example, control theory claims that employment exerts social control over an individual: an individual's lack of employment leads to a breakdown of positive social bonds for that individual, which in turn is hypothesized to induce the individual to increase his criminal activity, both violent and income related.<sup>3</sup> William Julius Wilson expands this theory to cover not just individuals but areas in his analysis of inner-city problems.<sup>4</sup> Using a series of carefully constructed studies of poverty areas in Chicago, he claims that "many of today's problems in the inner-city ghetto neighborhoods—crime, family dissolution, welfare, low levels of social organization and so on—are fundamentally a consequence of a disappearance of work."<sup>5</sup> Employment is seen as the main builder of

2. For example, see Levitt (forthcoming).

3. Gottfredson and Hirschi (1990).

4. Wilson (1995).

5. Wilson (1996: xiii).

pro-social bonds and institutions in a community, and its absence results in large-scale disorder. Anomie, another aggregate-level theory, suggests that frustration from income inequality and other aggregate-level problems causes individuals to resort to crime.<sup>6</sup>

The results presented by Fajnzylber, Lederman, and Loayza simply do not allow one to distinguish among these different interpretations. For generalized predictive purposes this may not be important; all one needs to know is what is likely to happen to the crime rate as inequality diminishes or the growth rate increases. However differentiating among these interpretations is essential for both scientific and policy purposes.

### *Data Quality*

Statistics on crime are notoriously weak for reasons that are obvious and well explored. For a half century, the United States has invested in improving the reporting of crime, most notably through the development of large-scale victimization surveys. The data system is now strong enough that for violent and property crimes, a fairly good description of the numbers and characteristics of offenders and offenses can be provided on an annual basis. Only a few other countries have developed comparably strong systems.<sup>7</sup> Many countries in the authors' sample (for example, India and Nepal) have very weak systems. The authors note that "one of the reasons cross-country crime studies are uncommon is that it is difficult to compare crime rates across countries. . . . Underreporting is widespread in countries with low-quality police and judicial systems and poorly educated populations."

Fajnzylber, Lederman, and Loayza use two sources of crime data for homicide. One is from the World Health Organization and is generated by reports from medical examiners or coroners. The other is from the United Nations, and it serves as a focal point for various criminal justice data. The UN data are derived from annual reports by national agencies, such as the FBI or the Japanese National Police Agency. The UN attempts to impose consistency across nations with respect to offense definitions, but given differences in legal systems, this can be very difficult, if not impossible. The authors are certainly correct that homicide is the vio-

6. Uggen (1994).

7. Lynch (1995).

lent crime most likely to be recorded in any society, but the definitional issues remain potentially severe. For example, the UN states that “comparisons of homicide are confounded by how deaths from drunken driving are recorded.”<sup>8</sup> Japan apparently includes a broad class of vehicular deaths, which may account for its surprisingly high level relative to other Asian nations.<sup>9</sup>

The consequences can be very serious, as shown in the summary statistics presented for the dependent variables. The most striking anomaly is that for Dutch homicide rates. Whereas the U.S. rate is about 8 per 100,000 over the period 1970–95, it is approximately 11 per 100,000 in the Netherlands, according to the UN data. This hardly accords with popular impression. In fact, a review of other reports based on the annual Ministry of Justice data show a homicide rate between 1 and 2 per 100,000, which is low by western European standards.<sup>10</sup> This discrepancy in the figures arises because the Dutch include attempted homicide (and perhaps euthanasia) in their reports to the United Nations.

Other anomalies are also apparent, though less dramatic. In the United Nations data, Sweden has twice the homicide rate of Great Britain over the twenty-five-year period, while reports from other sources show Sweden with slightly lower rates. Inspection of the figures for the five individual years in which the homicide data are reported in the UN’s *Surveys of Crime Trends* suggests that this is probably the result of definitional changes in Sweden. Whereas the three surveys for 1974, 1978, and 1984 show rates of 1.53, 1.50, and 1.39, for 1988 and 1993 the figures are 7.22 and 9.53.<sup>11</sup> This is approximately the level of the United States, and it is far above the western European mean found in other sources. This apparent wave of homicides since the mid-1980s (annual increases of 50 percent in each of four successive years) is inconsistent not only with impressions, but also with agency statistics on Swedish homicides. For example, the national statistical agency reports only 121 homicides in 1990, a rate of 1.5 per hundred thousand.<sup>12</sup>

8. UN (1999, p.43).

9. James Lynch (personal communication).

10. The 1995 figure was 1.8 (*Registered Murders in the Netherlands, Press Release, CBS Voorburg-Statistics Netherlands, 14 July 1998, cited by [www.csdp.org/factbook/thenethe.htm](http://www.csdp.org/factbook/thenethe.htm)*).

11. UN (1999).

12. Statistics Sweden (2000).

None of these anomalies should be surprising. In a careful review of four sources of cross-national homicide data, Bennett and Lynch described quality control for three of them with a single word: none. For the fourth source, namely, the WHO data, they used four damning words: minimal post facto edits.<sup>13</sup> These homicide figures constitute a set of numbers with a common label; whether they are in fact consistently collected data on a uniformly defined phenomenon is a fact to be established, not an assumption to be made.

One response might be that, with a robust estimating technique such as GMM, it only matters that the recording error be consistent. "Provided that the factors that determine the underreporting—or underrecording—of crime rates are relatively stable over time, their impact can be modeled by the inclusion of a time-invariant, country-specific component in the error term." However, the error may not be of the systematic kind the authors assert can be handled by GMM. For example, the reporting probability for robbery is likely related to income. Field, commenting on the United Kingdom, notes that "increased wealth . . . by providing the telephones and cars . . . make[s] crime reporting easier."<sup>14</sup> For countries moving rapidly from poverty to high income (for example, Korea), the effect may be very substantial. Given the significance of GDP growth rate in these models, this effect may be enhanced.

The macroeconomic data used to predict changes in violent crime may be as poor an indicator as the crime rate measures they seek to explain. For instance, it is well known that a substantial portion of GDP may be missed in official accounts. These omissions may take the form of unrecorded income, as in the case of agricultural production in India or micro-enterprise in Latin America; irregular income, such as the under-the-table payments common in southern Europe; or income that is difficult to measure, including the well-known countercyclical substitution of home production for market production.<sup>15</sup> Given that unrecorded and irregular economic activity may be substantial (up to 75 percent of GDP in less developed countries) and that the series in this paper is long enough to capture major internal economic changes, GDP changes may be capturing a shift from unrecorded to recorded income. Thus, it may not

13. Bennett and Lynch (1990, p.155).

14. Field (1999, p.11).

15. Schneider and Enste (2000); Tanzi (1999); Becker (1965).

be simply a nation's overall economic health that explains changes in violent crime, but also changes in the coverage of data collected.

### *Construct Validity*

Given the definitional inconsistencies and data gaps in cross-national data systems, the authors are forced to resort to inadequate proxies for some constructs. We focus here on just two: deterrence, because of its centrality to an understanding of crime, and the drug trade, because it features so prominently in the paper's conclusions.

The proxies for deterrence are the number of police per 100,000 population and a capital punishment statute. With regard to the use of the latter variable, the authors state that "the use of capital punishment in a given country is assumed to be an indicator of the overall severity of its legislation regarding the punishment of offenders." Yet in the developed world, capital punishment has become a historical oddity, with the frightening exception of the United States. Using this proxy, all western European nations (which constitute about a quarter of the sample countries) are treated as having the same sentence severity since 1981, though the average time served varies substantially. For example, whereas homicide convictions in the United Kingdom led to prison sentences averaging a hundred months, for Switzerland the figure was only fifty months.<sup>16</sup>

For the drug industry, the authors count a country as a drug producer if the U.S. State Department lists it as such in any year since 1986. Apart from the fact that the United States itself is a major producer (though net importer) and is not recorded as such by the State Department, the list is also selective in that it only covers nations that produce for the U.S. market. For example, the Netherlands is a major exporter of marijuana within western Europe, but it is not included in the list because it does not export to the United States.

Nor is the listing a plausible indicator of the possible contribution of drug production to violence. Contrast Bolivia and Colombia, two of the mainstays of the cocaine industry. Bolivia's involvement is almost exclusively in the coca-growing sector, exporting early-stage refined product. Most earnings accrue to small, rural producers with little incentive for

16. UN (1999).

either contractual or competitive violence. Colombia dominates the trafficking sector; earnings go primarily to a small number of organizations whose core competence involves command of violence.<sup>17</sup> The Colombian traffickers have challenged the power of the state over a period of decades, as well as engaging in numerous competitive killings. This exercise needs a proxy that captures more of the heterogeneity of the industry, for example, by distinguishing among sectors (production versus distribution) or drugs (cannabis versus cocaine).

### *Policy Implications*

Fajnzylber, Lederman, and Loayza are generally cautious in drawing policy implications. That caution is appropriate because the results themselves have little policy meaning: findings about the crime consequences of economic growth, inequality, and education are unlikely to affect views about the desirability of wealth, egalitarian income distribution, or more accessible and better quality education. The one area in which they choose to make comments directly relevant to crime policy is with respect to drugs.

The authors conclude that “our results point to the strong crime-inducing effect of activities related to illegal drugs.” After noting that they “leave definitive answers to the experts,” they go on to make two suggestions: first, reducing drug consumption requires “imposing penalties and punishments large enough to curtail the demand for illegal drugs,” and second, “the feasibility of legalizing drugs depends on whether the same conclusions can be reached for drug-producing and drug-consuming countries.” Given Latin America’s centrality in the drug trade, this issue of particular importance to *Economía*.

Few analysts of U.S. drug policy would agree that the nation with the Western world’s largest drug problem has failed to impose severe penalties on cocaine and heroin users. The United States devotes perhaps 100,000 prison and jail cells to those convicted of simple possession. Admittedly this is a modest 5 percent of all U.S. correctional capacity, but on a per capita basis it is almost as much as some Western European nations use for all criminal offenses. Perhaps the United States could do

17. Thoumi (1995). Since the mid-1990s it appears that the major drug trafficking enterprises, associated with Cali and Medellín, have been replaced by a larger number of smaller enterprises, numbering perhaps in the hundreds. However, this comes after the period covered by Fajnzylber, Lederman, and Loayza.



more; MacCoun and Reuter estimate the annual probability of a cocaine user being arrested for that offense as only about 6 percent.<sup>18</sup> But when one takes into account arrests of impoverished cocaine and heroin users for crime, including dealing, to support the costs of their own consumption, the annual probabilities may be closer to one quarter and the share of time spent incarcerated even higher.

Nor is it the case that the “United States and Europe . . . prefer to fight the drug wars far from their borders.” The share of the massive U.S. drug budget going to international programs is consistently less than 5 percent.<sup>19</sup> Most of the money goes to domestic law enforcement, precisely as the authors suggest be done. Western European nations dedicate an even smaller share to international control programs.

As to legalization, the authors correctly observe that producer countries, such as Colombia and Mexico, would benefit substantially in terms of reduced violence and corruption, while consumer countries would probably not benefit. However, this decision can be made solely by the consumer countries. If the United States decided to legalize the production of cocaine, for example, the production might well be located in the Mid-west, with new, higher-yield varieties grown in a much smaller area; whether or not the producer countries also legalized would hardly affect the price of cocaine or heroin. The dominance of the Andean countries arises primarily from the toughly enforced prohibitions in the United States.

The drug policy comments are interesting conjectures, but again, they hardly flow from the authors’ results. Colombia and Mexico have many reasons for wanting to eliminate drug production; using cross-national data to demonstrate that their violent crime rates would be lower and robbery rates higher hardly affects this. [The assertion about the need for a consistency of interests among consumer and producer countries also does not relate to the findings of this study.]

### *Conclusions*

The paper’s weaknesses are mostly inherent in the approach used rather than in lack of diligence or skill on the part of the authors. National criminal justice and public health systems employ a variety of definitions and

18. MacCoun and Reuter (forthcoming).

19. Office of National Drug Control Policy (various issues).

measurement methods, which generate data of poor quality. This weakens cross-national comparisons with aggregate data. The international agencies that provide these data are underfunded and not very expert; they can do little to improve accuracy and consistency. For researchers to learn enough about these differences to make sensible adjustments requires investing a great deal of time to develop a class of knowledge.

There is also a very limited set of available proxies for explanatory variables because less wealthy countries have limited administrative data systems. Even the choice of dependent variable is driven by the limits of availability. Homicide is not the crime one would pick to test the Becker/Ehrlich model, which is clearly more relevant to income-generating crime than to violent crime. However, it is the crime for which cross-national data have at least some plausibility. The limits of the data also limit the power of policy conclusions that can be drawn.

Finally, given the paucity of available data, it is not clear what conclusions can be drawn from them. The consequences of economic development for crime rates across countries is an interesting issue, quite independently of any claim to test a broader model of the determinants of crime. The challenge is to find an approach that is not so vulnerable to the limitations of cross-national data and can yield meaningful policy conclusions.

**Alejandro Gaviria:** This paper presents a comprehensive survey of the main empirical findings about the determinants of crime and violence. First, the paper reviews the economic literature in this area, showing that in recent years the emphasis has shifted from economic considerations to social interactions and other social aspects. The paper then surveys the cross-national evidence on the determinants of violent crime—an area in which the authors have made groundbreaking contributions. Finally, the paper surveys various studies that use victimization data to determine who are the most likely victims of crime in Latin American cities.

In these comments I focus on the last two sections of the paper, beginning with some methodological issues concerning the cross-country results. I then address the authors' interpretation of two key results: the positive connection between inequality and violent crime and the negative connection between social trust and violent crime. Finally, I comment briefly on the victimization studies presented in the last section of the paper.

*A Methodological Point: The Simpler, The Better*

The paper analyzes the main correlates of violent crime in a cross-country setting. The dependent variable is either the homicide rate or the robbery rate, and the independent variables include inequality, growth, and development indicators. The data set consists of an unbalanced panel of about forty-five countries and five periods of five years each. The authors use a dynamic specification in which the crime rate depends not only on country attributes, but also on the crime rate of the preceding period. This specification is consistent with various theoretical and empirical studies that suggest inertia is a prominent characteristic of the evolution of crime over time.

Table 10 contains descriptive statistics of the main variables used in the paper. The table shows, in particular, that both the main dependent variable (the log of the homicide rate) and the three core explanatory variables (the Gini coefficient, the GDP growth rate, and the GDP per head) vary much more across countries than over time within countries. According to this result, any estimation method that ignores the cross-sectional dimension of the data will entail substantial losses of efficiency. Knowing this, the authors use a generalized method of moments (GMM) estimation method that considers not only the longitudinal dimension of the data, but the cross-sectional dimension as well.<sup>1</sup> This method allows for the presence of joint-endogeneity, and it yields consistent estimators of the coefficient on the lagged dependent variable.

**TABLE 10. Descriptive Statistics of Main Variables**

Variable	Mean	Standard deviation		Minimum	Maximum
		Between	Within		
Gini coefficient	38.54	8.88	1.56	22.8	58.0
GDP growth	3.89	2.37	1.21	-2.9	11.5
GDP per capita (dollars)	6,552	4,572	804	684	17,845
Log homicide rate	1.45	0.93	0.28	-0.7	4.4
Growth of homicide rate (percent)	11.0	30.8	29.0	-219.3	133.4

Source: Author's calculations based on data from the United Nations and the World Bank.

1. This method was first proposed by Arellano and Bover (1995).

The GMM estimation method used in the paper also has several shortcomings, however, none of which is discussed by the authors. First, this method does not completely eliminate the possibility of biases stemming from omitted country attributes that are correlated with the explanatory variables. Second, the small-sample properties of the estimators are unknown. And third, the standard errors are likely to be severely underestimated.<sup>2</sup>

The authors of the paper overlooked a simpler (and, in my opinion, better) estimation method: ordinary least squares (OLS). The available Monte Carlo evidence dealing with dynamic panel estimation unambiguously shows that when the dependent variable exhibits high levels of inertia (as it does in this case), OLS is by far the best estimation method.<sup>3</sup> When I tried to replicate the main results of the paper using OLS, I found similar coefficients but much higher standard errors, which casts serious doubts on the significance of the results reported in the paper.

### *Inequality and Violent Crime: The Latin American Effect*

The positive connection between inequality (measured by the Gini coefficient) and violent crime (measured by either the homicide rate or the robbery rate) is perhaps the main empirical result of this paper. This connection is not only statistically significant, but also quite substantial: an increase in the Gini coefficient of 10 points (approximately the difference between Costa Rica and Mexico) will increase the homicide rate by more than 50 percent. This result, however, appears to be rather sensitive to the inclusion of regional dummies.

Table 11 reproduces the core results of the paper using OLS. The connection between inequality and the homicide rate is significant and substantial, but this connection weakens considerably and loses its significance completely when we introduce a dummy for Latin America, thus casting serious doubts on the causal link between inequality and violence postulated in the paper.<sup>4</sup> If the empirical association between the Gini and

2. See, for example, the Monte Carlo evidence presented by Judson and Owen (1999).

3. See the Monte Carlo evidence presented by Kiviet (1995) and Judson and Owen (1999). Kiviet states, "We find that OLS has an impressingly small standard deviation, and therefore, when bias is moderate (which it is when the coefficient on the dependent variable is high), it has an attractive mean squared error" (1995, p. 70).

4. The same point is made by Bourguignon, who states that the coefficient on the Gini "becomes insignificant when a dummy variable is introduced for Latin America in the homicide regression" (1999, p. 22).

**TABLE 11. Determinants of Homicide Rates: Panel Information, 1970–94<sup>a</sup>**

<i>Independent variable</i>	(1)	(2)
Lagged homicide rate (logs)	0.844 (21.94)	0.832 (20.809)
Gini coefficient	0.012 (2.59)	0.008 (1.385)
GDP growth	-0.059 (-4.417)	-0.052 (-3.302)
GDP (logs)	-0.009 (-0.211)	-0.010 (-0.24)
Dummy for Latin America and the Caribbean		0.132 (1.107)
Number of observations	153	153
Number of countries	56	56

Source: Homicide rates are from the UN data set; other variables are from World Bank, *World Development Indicators*.

a. Dependent variable is the log of the homicide rate. Standard errors are in parentheses.

the homicide rate is mainly driven by the differences between Latin America and the rest of the world, the causal link between these two variables becomes very difficult to defend, as one can think of many circumstances surrounding the history and institutions of Latin America that can explain both its high inequality and its high crime rates. The authors explore some of these circumstances but many others remain to be studied.

The connection between violent crime and inequality thus appears more fragile than the paper indicates. And the possibility that this connection is driven by unobserved regional (or country) characteristics cannot be completely ruled out.

### *Inequality versus Mobility*

The paper contains a lengthy discussion about the interpretation of the positive connection between inequality and violent crime. The authors explore several alternatives, rule out various hypotheses, and conclude that a simple economic argument may be at the heart of this connection. In their view, inequality increases violence by depressing the economic prospects of the poor. Their argument is simple: in more unequal societies, the poor earn less and are more numerous, which increases the number of people

willing to commit crimes, which in turn raises crime and ultimately violence.<sup>5</sup>

Although theoretically plausible, this mechanism is at odds with the available ethnographic evidence (not to mention most popular accounts of the origins of crime and violence).<sup>6</sup> What appears as the main driving force of crime in most ethnographic studies is not so much the absence of reasonable economic opportunities as the absence of social mobility (that is, the frustration that comes with knowing that one's prospects of mobility are very limited and that most opportunities of advancement are irremediably closed). If this is the case, social justice and violence are still connected, but the connection is, by its very nature, deeper and less dependent on a short-term worsening of the income distribution. Therefore, changes in equality would affect violence only if they entail a change in the way opportunities are distributed in society.

Although the validity of the latter hypothesis is difficult to examine using cross-country data, figure 2 offers some suggestive evidence. The top panel of the figure shows the association between the Gini coefficient and the log of the homicide rate for fourteen Latin American countries.<sup>7</sup> Only a slight connection is found between these two variables, which should not be surprising in light of the results of table 12. The bottom panel of the figure shows the association between an index of social rigidity and the homicide rate for the same sample of countries.<sup>8</sup> These two variables demonstrate a strong connection, which lends some support to the hypothesis presented above. This evidence is consistent with the view that violence will flourish when the prospects of mobility are low, and it contradicts the alternative view that inequality is a direct cause of violence. Of course, more research is needed to confirm these trends and to elucidate the main mechanisms through which the absence of mobility affects violent crime.

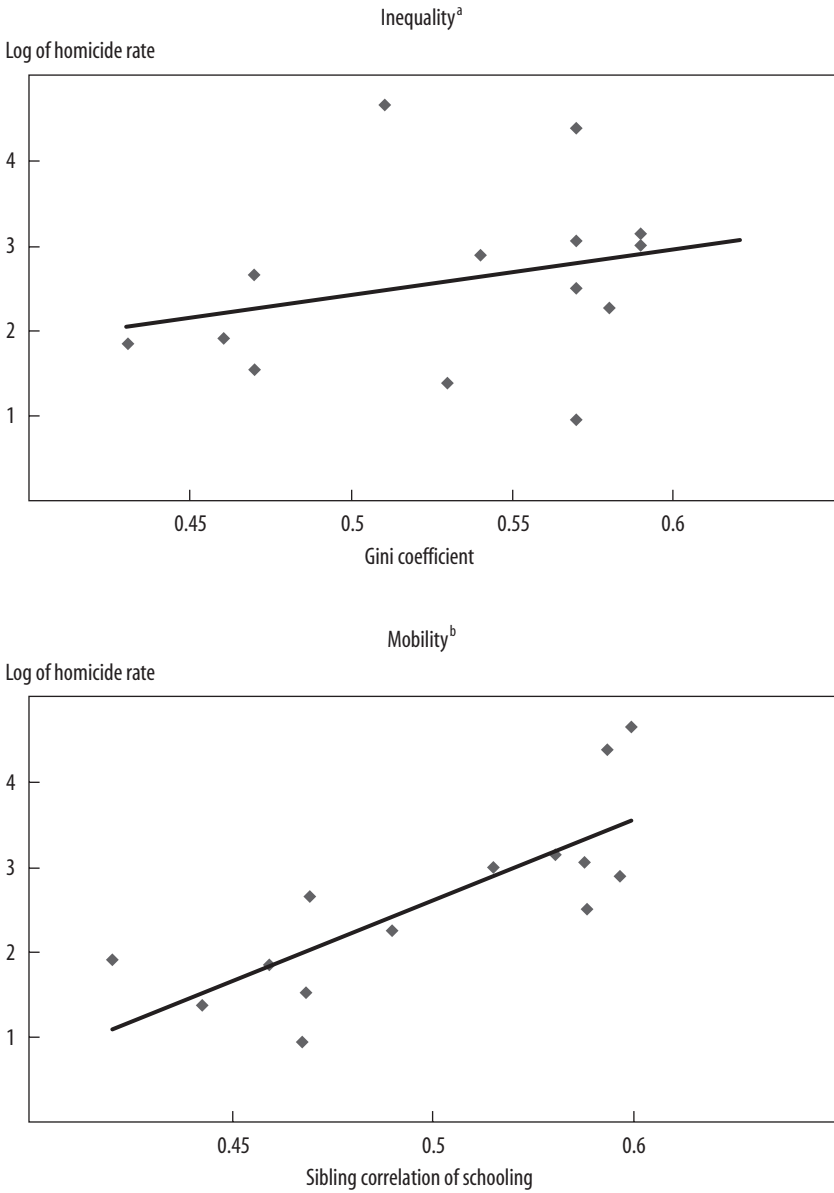
5. See Bourguignon (1999) for a formal model of this idea.

6. See, for example, Wilson (1987, 1996) on inner city violence in the United States; Levitt and Venkatesh (1998) on gang violence.

7. The countries included in the graph are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Nicaragua, Panama, Peru, Uruguay, and Venezuela.

8. This index, which was developed in a recent paper by Dahan and Gaviria (2000), is based on the correlation of schooling among teenage siblings: the higher this correlation, the lower the prospects of mobility.

**FIGURE 2 . Inequality versus Mobility**



Source: Dahan and Gaviria (2000) and United Nations data set.

a. Correlation = 0.27.

b. Correlation = 0.78.

*Social Trust and Violent Crime: The Need to Go beyond the Cross-Country Evidence*

The authors report a negative association between social trust (measured as the percentage of people who self-report trusting others in social exchanges) and the homicide rate. They also present some evidence that a decline of trust will cause an increase in the homicide rate.

Many doubts remain as to the true meaning of the association between social trust and violent crime. Too many possibilities are consistent with the evidence presented in the paper. This evidence may indicate, for example, that the members of more trusting societies are better able to organize themselves to fight crime. At the same time, the members of more trusting societies are also more trustworthy and more likely to abide by the law as a matter of principle.<sup>9</sup> Trust, then, may be just a proxy for the presence of a strong collective preference for law and order. Alternatively, trust may be a proxy for good institutions of conflict resolution. If people know that any potential dispute will be resolved in an expedient manner by an objective third party, they will be less likely to think twice before bestowing trust on their fellow citizens. In the same way that good fences make good neighbors, good courts can make trusting partners.

Unfortunately, the cross-country evidence presented in the paper gives no clues as to which of the mechanisms mentioned above is most important. Without a clear understanding of the mechanisms at work, the empirical association between social trust and violent crime has no policy relevance. In my opinion, if we are to understand the complex relation between crime and social capital, we need to undertake more detailed case studies. The cross-country evidence clearly does not provide enough resolution to understand what is going on here.

*Victimization Studies: The Need to Go beyond Description*

The paper presents the results of various studies that use victimization data to identify the main risk factors associated with crime victimization in various Latin American cities. Most of these studies lack an analytical framework and put too great an emphasis on description. Most of the studies show, for example, that individuals who hold regular jobs are more likely

9. Glaeser and others (1999) present experimental evidence showing that the available measures of social trust are indeed measures of trustworthiness.



to be victims of crime. In my opinion, this result says little to either the social scientist who is interested in the root causes of crime (there are numerous, equally plausible hypotheses that are consistent with this result), or to the practitioner who is interested in designing policies for crime control and prevention (it would be almost impossible to design an anti-crime policy specifically targeting such a heterogeneous group).

One should approach victimization data not with the open mind of the epidemiologist who wants to find out more about risk factors, but with the probing mind of the economist who wants to test whether a theory is consistent with the evidence at hand. Victimization data, when used imaginatively, can provide alternative ways to test some of the most controversial theories about the causes of crime. To give just one example, some of the same theories that predict that inequality causes crime also predict that wealthier individuals are more likely to be victimized. In sum, victimization studies can greatly advance our knowledge about the root causes of crime, but an informed approach to the evidence is paramount in this case.

This paper gives the reader a good sense about some of the reasons why some countries are more violent than others. The authors use a variety of approaches, and although one often would like to see a more obvious common thread, the paper makes up in breadth what it lacks in unity.

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