

Crime Distribution and Victim Behavior during a Crime Wave

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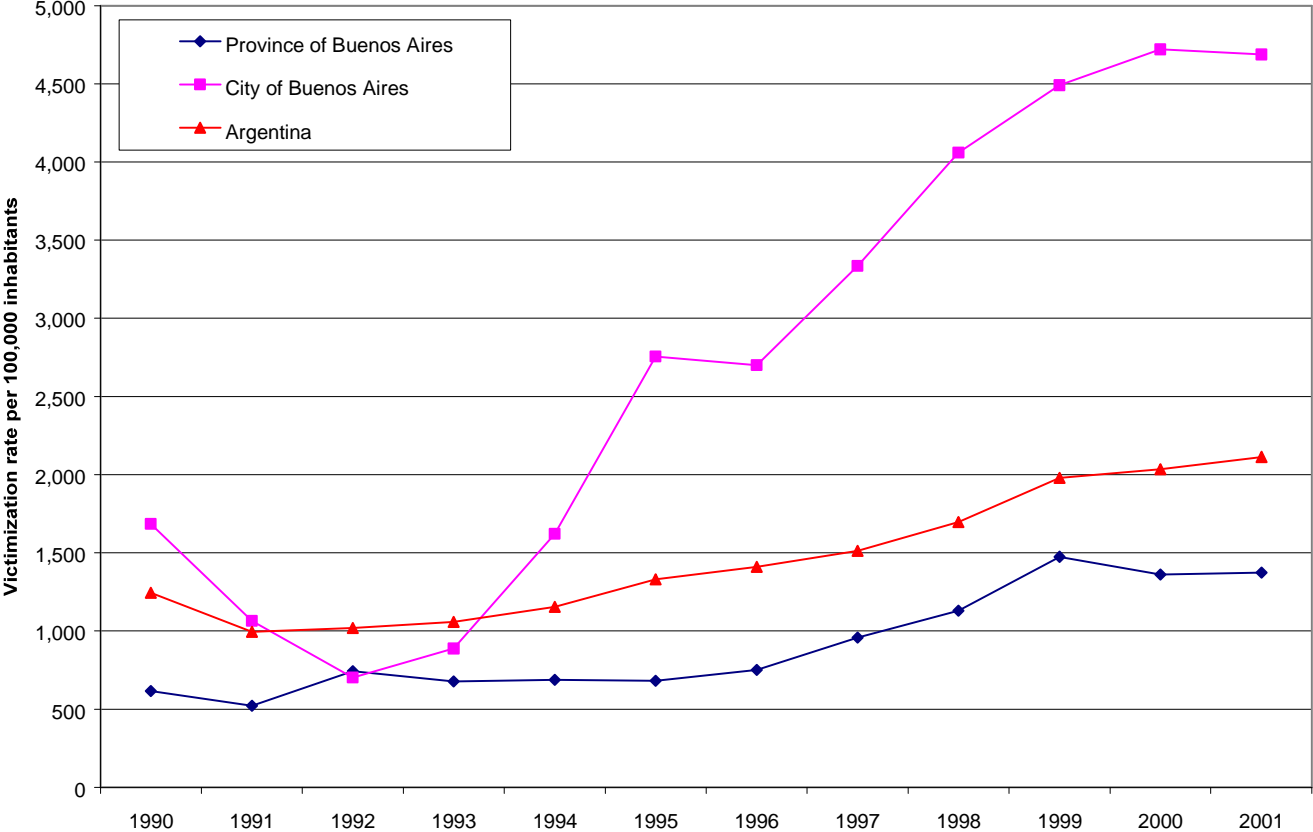
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Motivation

- Does crime affect more the rich or the poor?
- No clear answers yet, given the difficulties of studying how crime affects different income groups.
- A first difficulty is that crime-avoiding activities vary across income groups. Thus, a lower victimization rate in one group may not reflect a lower burden of crime, but rather a higher investment in avoiding crime.
- A second difficulty is that, typically, only a small fraction of the population is victimized so that empirical tests often lack the statistical power to detect differences across groups.

Our approach takes advantage of a dramatic increase in crime rates in Argentina during the late 1990s.

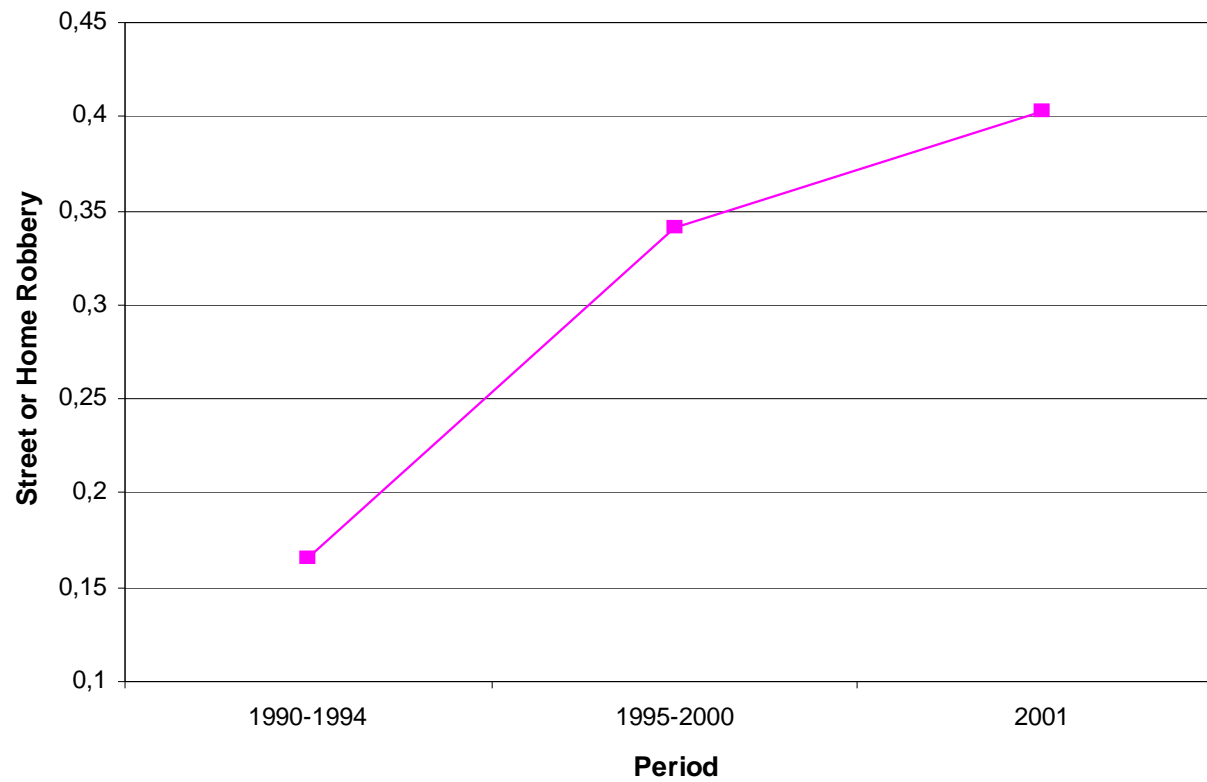
Figure 2: Reported Property Crime



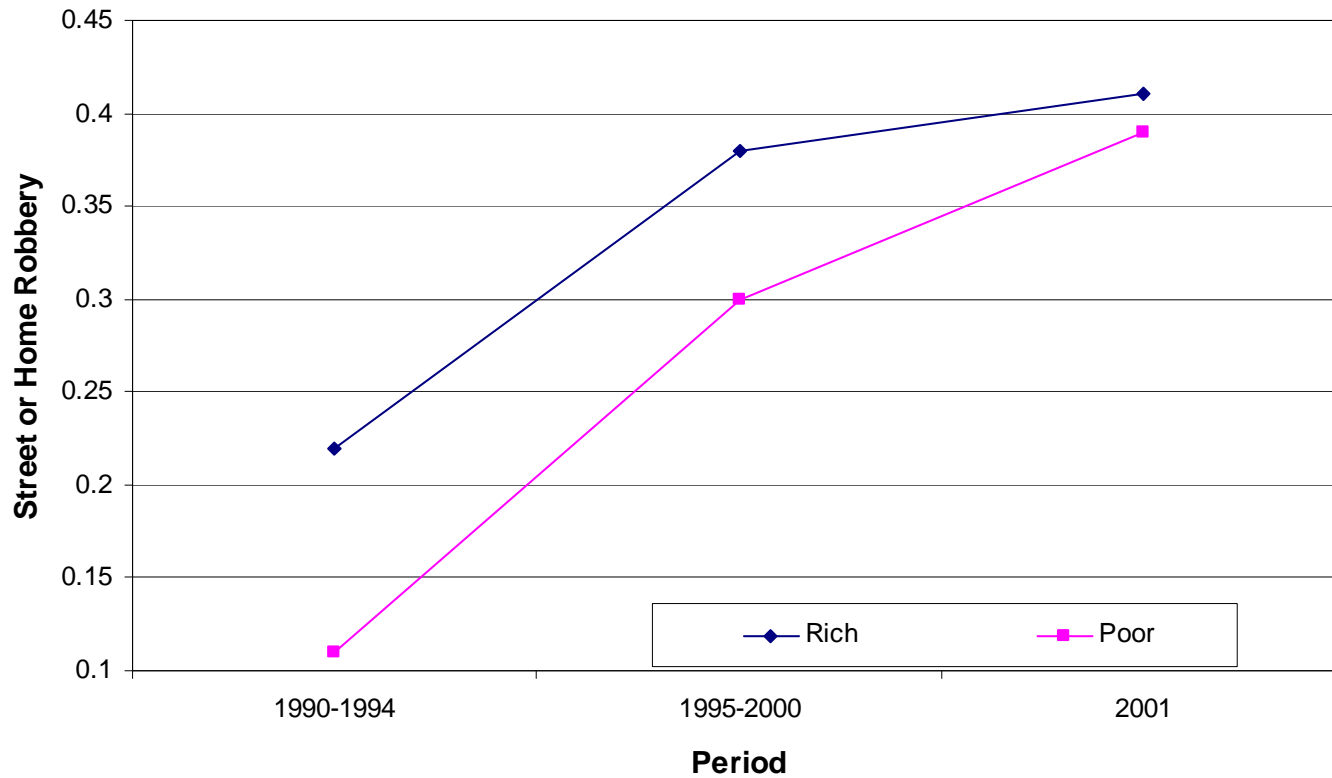
Our Retrospective Survey

- The target population of the study was the population of the Buenos Aires Metropolitan Area. The questionnaire was performed to 200 households in the City of Buenos Aires and 200 households in the suburban Great Buenos Aires through telephone interviews.
- In addition, 100 street interviews were performed to people that declared not to have a home telephone line.
- The survey collected information for 1990-2001 on victimization events, crime reporting, behavioral responses to crime, consumption of private protection, possession of durable goods and assets, and demographic household information. Consistent recall.
- Note that official crime statistics do not typically collect such data, so that their inadequacy (for the purposes of this paper) goes beyond the usual difficulties arising from victim underreporting or political manipulation.

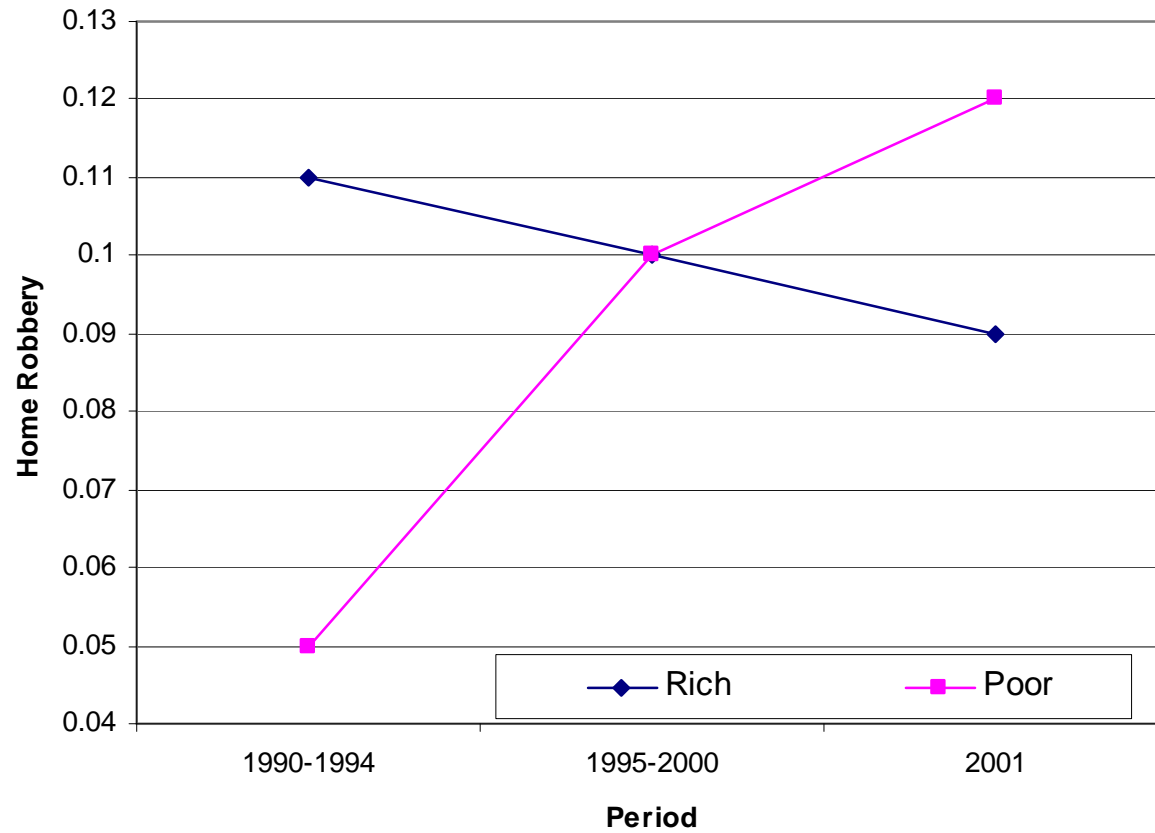
1. We find a large increase in total victimization.



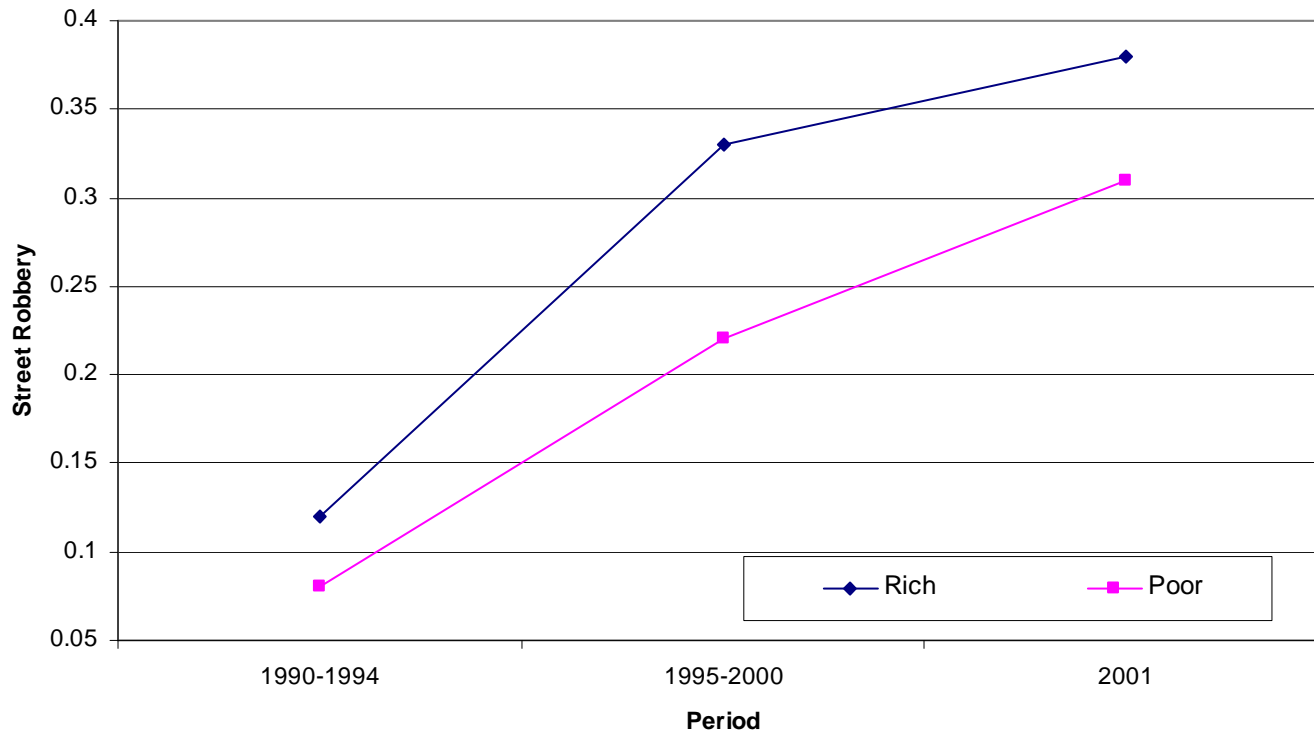
2. The increase in victimization experienced by the poor is larger than the increase endured by the rich. The difference appears large: low-income people have experienced increases in victimization rates that are almost 50 percent higher than those suffered by high-income people.



3a For home robberies, where the rich can protect themselves (by hiring private security, for example), we find significantly larger increases in victimization rates for the poor.

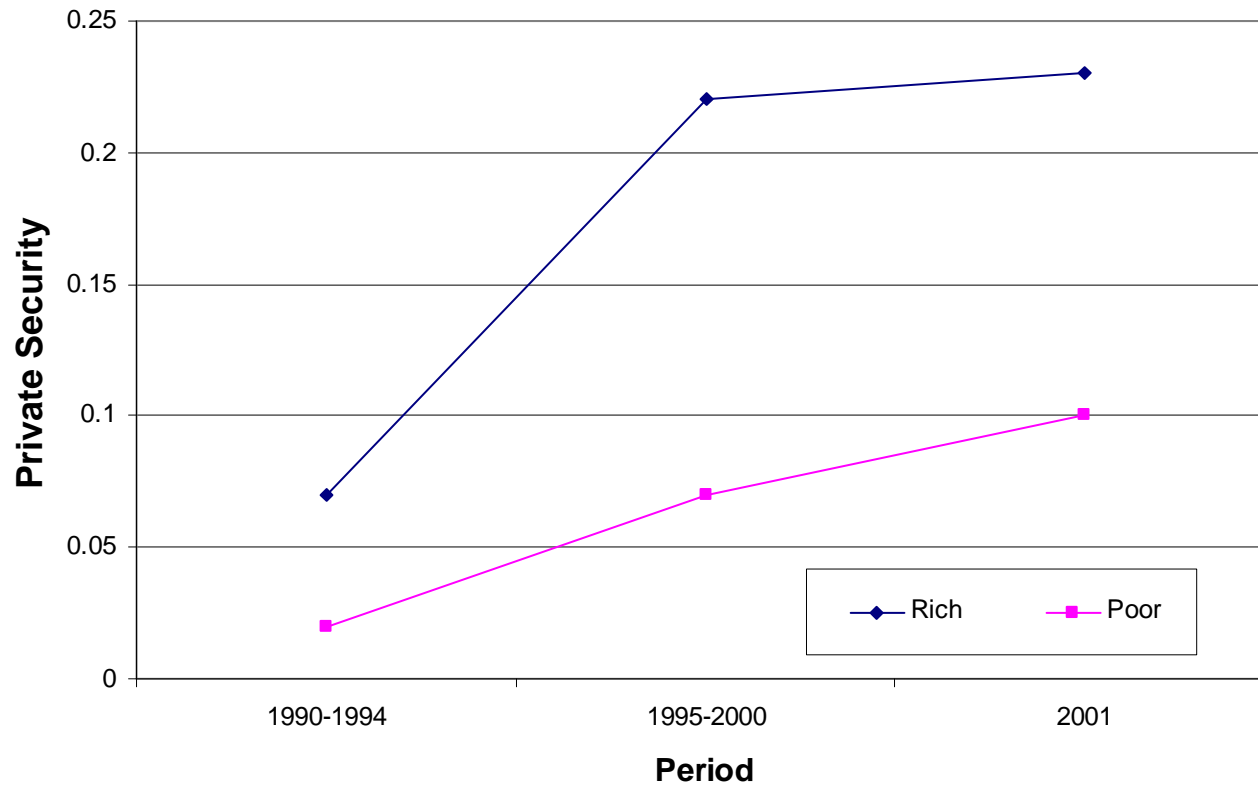


3b. For robberies in the street, where the rich can only mimic the poor, we find similar increases in victimization for both income groups.

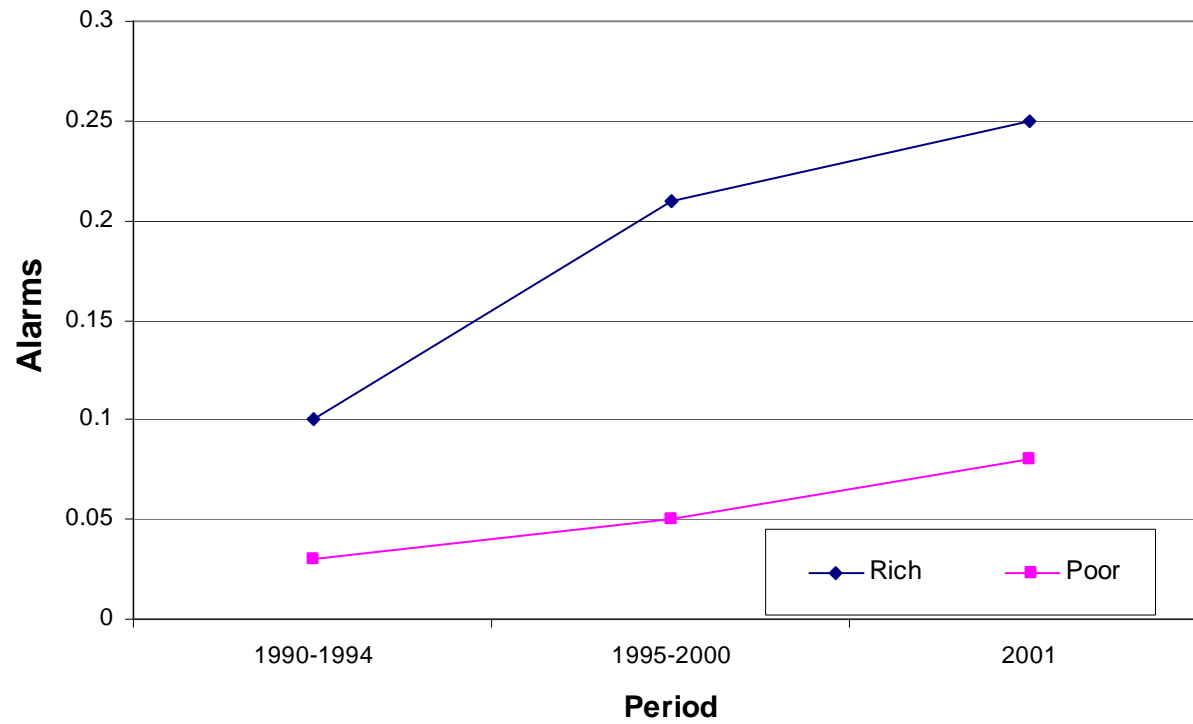


We document direct evidence on pecuniary and non-pecuniary protection activities by both the rich and poor, ranging from the avoidance of dark places to hiring of private security.

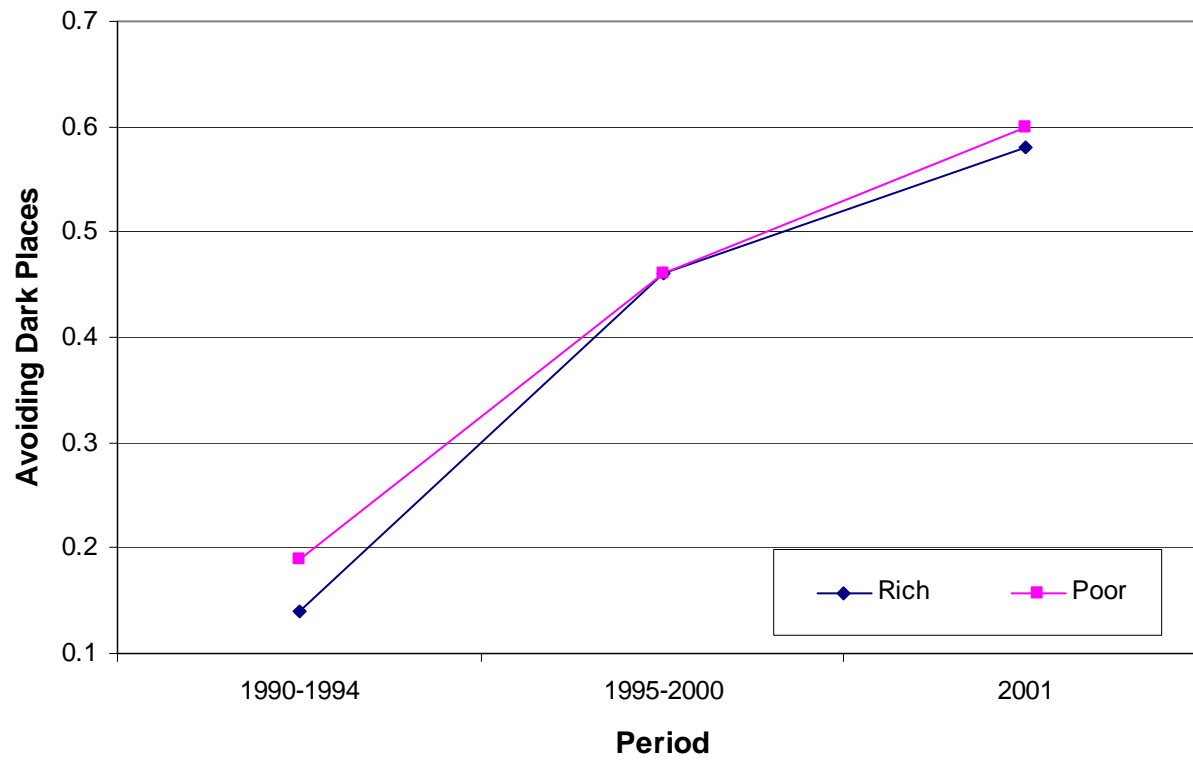
4.a. Private Security (pecuniary)



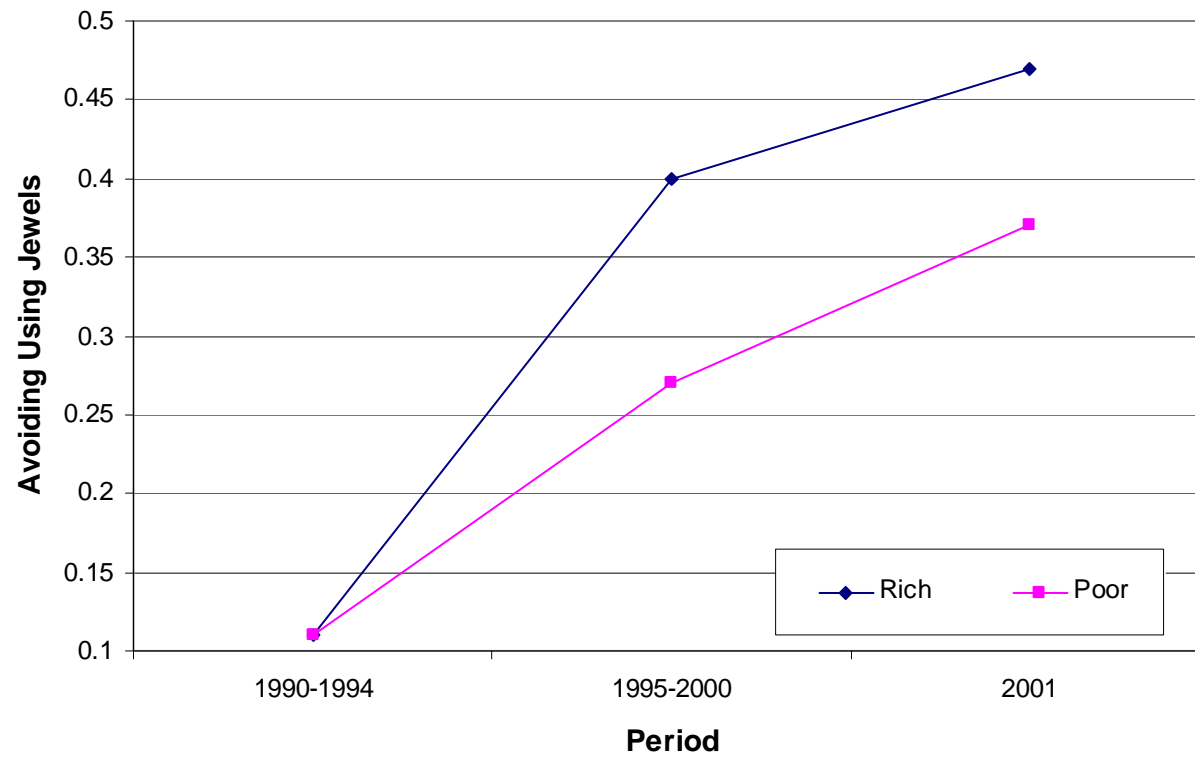
4b. Alarms (pecuniary)



4.c. Avoiding Dark Places (non-pecuniary)



4.d. Avoiding Use of Jewels



5. We use our estimates to explain the incidence of crime across income groups.

- We obtain the correlations between changes in protection and changes in home victimization, and discuss its casual interpretation.
- Using this estimated effect of the use of security devices on crime victimization, and the increase in the use of security devices at home by the rich, we estimate the reduction in home victimization experienced by the rich explained by the use of security devices.
- We compare this figure to an estimated measure of the increase in home victimization for the period 1990-2001 in the absence of victim adaptation
- The rich are predicted to have avoided a large share (70%) of the crime increase.
- This is consistent with the observed dynamics of home victimization for the rich: The change in home robbery between 1990 and 2001 for the rich is not statistically significant at conventional levels. Thus, the evidence is broadly consistent with the hypothesis that the rich homes avoided the Argentine crime wave by increasing their level of protection.

5. We use our estimates to explain the incidence of crime across income groups.

- On the other hand, the increase in the use of home security devices by the poor predicts that the poor were able to reduce only 27 % of the crime shock.
- However, this predicted increase in the crime victimization suffered by the poor is inconsistent with the observed dynamics of home victimization for the poor. The predicted rate of home robbery for the poor is less than half of what is actually observed.
- We conjecture that this discrepancy is the result of a **negative externality** arising from home protection by the rich.
- As a response to the large increase in crime, the rich protected themselves avoiding all the effect of crime while the poor received more crime than otherwise as a result of the displacement or negative externality generated by the rich.

Conclusions

- Little previous evidence on distribution of crime across income groups because of small statistical power and victim adaptation, which varies across income groups. We exploit a dramatic increase in crime that took place in Argentina during the 1990s and implement a new survey on crime victimization and adaptation.
- **More for the poor:** The increase in the total victimization rate for the poor was 1.5 times the increase in total victimization observed for the rich.
- **Same on the street:** Changes in victimization in the street were similar for both income groups.
- **Different at home:** In contrast, the increase in victimization at home was larger for the poor than for the rich. This pattern is suggestive of victim adaptation because the differential ability of the rich to protect themselves is higher at home.
- **Rich adapt:** Direct evidence reveals more adaptation by the rich (private security and alarms). Similar avoidance of dark places and the rich avoid more using jewels

Conclusions

- For victimization at home, and under a causal interpretation of our estimates, we note that the rich are predicted to have avoided almost all of the crime increase. This is indeed consistent with the observed dynamics of home victimization for the rich (which exhibits no detectable change).
- On the other hand, the poor are predicted to have avoided a small part of the increase in crime. This is inconsistent with the observed dynamics of home victimization for the poor, which exhibits a much larger increase.
- We conjecture that this discrepancy is the result of the displacement of crime from the rich to the poor arising from home protection by the rich.