

Data Appendix

The UCR data is essentially unedited by the FBI and there is tremendous heterogeneity across cities in the quality of the reporting. As a result, the data requires thorough ‘cleaning’ before use. There are a number of coding errors in the crime and employment data vastly under or overstating crime for a particular jurisdiction. Some states have years in which almost all agencies drastically underreported crimes including Alabama in 1990, Florida in 1996, Wisconsin in 1998, South Carolina in 1991, and South Dakota in 1996 (Maltz, 1999).¹ To identify potential outliers in the data, we regressed violent and nonviolent crime rates in each jurisdiction on a quadratic time trend. If any agency has an observation where the predicted and actual values of the dependent variable for either crime rate differed by more than 50 percent in absolute value, we visually inspected the time series for all index crimes for that agency.² In some cases, it appeared as if agencies used 999 or 99999 instead of a missing value code, and in these instances, we simply edited the data.³ In other instances it is clear that a keypunch error occur but it is not obvious how to adjust the data. In these instances, we excluded those years of data from our regressions. Any agency that had four or more years where the predicted and actual values differed by more than 50 percent, we deleted the entire time series. We also delete data for 24 agencies that ever report employing no police officers. Finally, we follow the FBI’s procedures for constructing national crime estimates and delete data for Illinois in estimates of rape.⁴

We were unable to match a non-trivial number of grants to agencies in the UCR. The large number of grants that could not be matched back to an agency in the UCR was also noted by Davis et al (2000) in their analysis of the COPS programs. The 2,683 agencies we were unable to match appeared to be primarily small towns that would not appear in our sample of cities with 10,000 people or more, or

¹ Some of the error may be due to adoption of new computerized reporting systems in the early 1990s. Helen Balok, of Fort Collins, CO Police Department.

² Less than 5 percent of the observations have more than 50 percent absolute difference between predicted and actual values. The 50 percent rule also captures nearly all of the underreporting in the particular states listed above (e.g., Alabama in 1990, Florida in 1996, etc.)

³ The Hillside Township, NJ, Police Department monthly rape reports for 1993 are as follows:

Jan: 1 Feb: 1 March: 2 Apr: 999 May: 1 June: 0 July: 1 Aug: 1 Sep: 0 Oct: 2 Nov: 1 Dec: 0.

⁴ Illinois has a broad, gender-neutral definition of rape that does not correspond to the definition used by the FBI. As a result, Illinois police agencies do not report any rapes to the FBI. There are only 4 Illinois agencies in our sample.

they were grants to jurisdictions that did not report data to the UCR. There are 1,865 unmatched grants to local police agencies in 542 cities. Of the largest 100 UHP grants to these cities, only four are to agencies serving populations in excess of 10,000 people in 2000. The average unmatched SCGP grant is \$8,769, compared to the matched average of \$17,959. The average matched CIS award is just under twice the size of the average unmatched grant, \$65,414, compared with \$34,128. Matched UHP awards averaged 3.4 officers, and the average grant was for 1 officer. The average unmatched UHP grant was also for 1 officer, with a mean grant size of 1.3 officers. Unmatched grants are very similar in magnitude to grants to agencies smaller than 10,000 people, an average of \$36,000 for CIS grants, \$13,100 in SCGP grants, and 1.3 UHP officers. This grant comparison strongly suggests that our unmatched grants were likely to fail our population requirement, and their exclusion does not bias our sample.