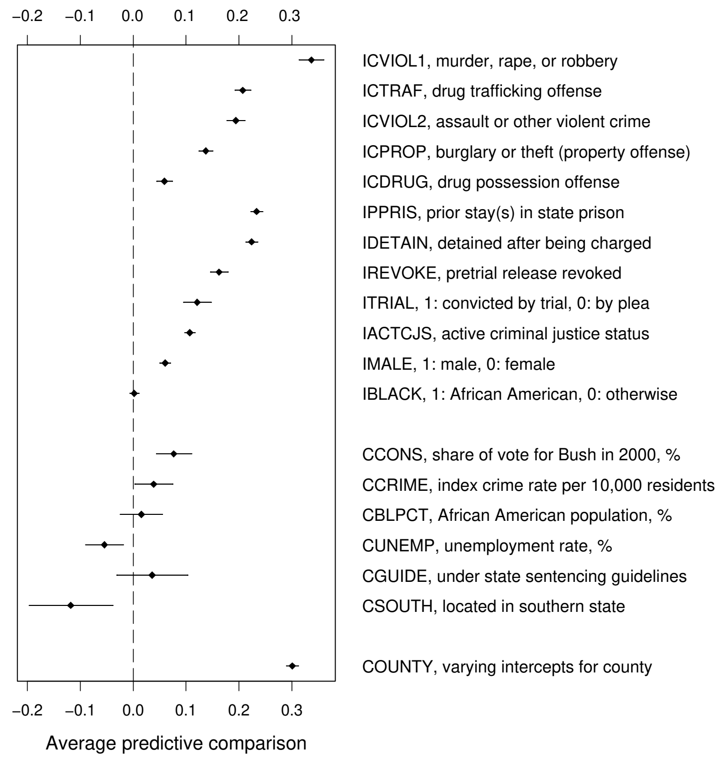

Figure 21.6 *Estimated average predictive comparisons B_u for the probability of a prison sentence (rather than a jail or noncustodial sentence), for each input variable u in the prison example. Horizontal lines show ± 1 standard-error bounds. The first set of inputs, with initial letters I, are at the level of the individual offender; the second set, with initial letters C, are county-level inputs; and the last corresponds to the differences associated with varying the county indicator, keeping all other inputs constant. Many of the individual predictors are associated with large differences and county itself predicts a fair amount of variability, but the county-level variables are associated with relatively small differences (recall that these average predictive comparisons correspond to differences of one standard deviation in each input).*

and $n = 4000$ for the varying county coefficients. Results varied little on repeating the calculations with different random subsets.

Individual-level variables in Figure 21.6 are denoted with an initial "I," and county-level variables are denoted with an initial "C." The five individual-level variables for "most serious conviction charge" (ICVIOL1, ICTRAF, ICVIOL2, ICPROP, and ICDRUG) are relative to a reference category of weapons, driving-related, and other public order offenses. The 12 individual-level variables and 2 of the county-level variables are binary, and the remaining 4 county-level variables are continuous. Finally, the county indicators are a batch of parameters in a multilevel model.

The individual-level predictor associated with the largest difference in the probability of receiving a prison sentence is ICVIOL1 (murder, rape, or robbery), with an estimated average predictive comparison of 0.38 (and standard error 0.03). That is, the expected difference in the probability of receiving a prison sentence between a randomly chosen individual in the population charged with murder, rape, or robbery and a similar individual charged with a reference category offense is 0.38.