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Nota di contenuto	Contents; I. Motivation; II. The Data Structure and the Bias of the Estimator; III. The Bandwidth and Kernels Considered; IV. Monte Carlo Study; A. Theoretical Distributions; B. Summary Statistics, Density Estimates and Diagrams; C. Poverty Estimates; V. Country Studies; VI. Global Poverty; VII. Conclusions; References; Appendix; Appendix Figures; 1. Distributions used in Monte Carlo analysis; 2. Bias of KDE-based density (log-normal distribution); Appendix Tables; 1. Summary statistics from KDE-based sample; 3. Bias of estimated density (multimodal distribution) 4. Bias of estimated density (Dagum distribution)2. Bias of poverty measures (Low and High Poverty Lines); 5. Bias in the poverty headcount ratio versus location of poverty line; 3. Bias of poverty measures (Triweight kernel, Poverty line: 0.25 x median); 4. Bias of poverty measures (Hybrid bandwidth, Poverty line: 0.5 x median); 5. Bias of poverty measures (Epanechnikov kernel, Silverman bandwidth); 6. Bias of poverty measures (Gaussian kernel, Poverty line: Capability); 6. Survey-based and grouped data KDE-based density estimates; 7. Global poverty rates (% poor) 8. Global poverty counts (millions)
Sommario/riassunto	We analyze the performance of kernel density methods applied to grouped data to estimate poverty (as applied in Sala-i-Martin, 2006, QJE). Using Monte Carlo simulations and household surveys, we find that the technique gives rise to biases in poverty estimates, the sign and magnitude of which vary with the bandwidth, the kernel, the number of datapoints, and across poverty lines. Depending on the chosen bandwidth, the $1/day poverty rate in 2000 varies by a factor of 1.8, while the $2/day headcount in 2000 varies by 287 million people. Our findings challenge the validity and robustness of poverty estimates derived through kernel density estimation on grouped data.