

# **Top Incomes and the Measurement of Inequality: A Comparative Analysis of Correction Methods using Egyptian, EU and US Survey Data**

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**Paper Abstract:** It is sometimes observed and frequently assumed that top incomes in household surveys worldwide are poorly measured and that this problem biases the measurement of income inequality. This paper tests this assumption and compares the performance of reweighting and replacing methods designed to correct inequality measures for income biases generated by unit or item non-response. The European Union's Statistics on Income and Living Conditions (EU-SILC), the United States' Current Population Survey (US-CPS) and the Egyptian Household Income, Expenditure and Consumption Survey (EG-HIECS) are used as prototypes of vastly different data sets. Results indicate that survey response probability is negatively associated to income per capita thereby confirming that unit or item non-response bias the measurement of income inequality. When using reweighting methods, the higher the level of geographical disaggregation the lower the estimated bias of the Gini. Middle levels of geographical disaggregation are found to perform better than hyper aggregation or hyper disaggregation. When using replacing methods, the Pareto coefficient is sensitive to the cut-off point of the distribution. The use of Pareto distributions results in larger corrections as compared to the use of generalized beta distributions but the difference is not very large.