Accepted Manuscript

Gini estimation under infinite variance

Andrea Fontanari, Nassim Nicholas Taleb, Pasquale Cirillo

PII: S0378-4371(18)30189-4
DOI: https://doi.org/10.1016/j.physa.2018.02.102
Reference: PHYSA 19222

To appear in: *Physica A*

Received date : 19 July 2017
Revised date : 21 December 2017

Please cite this article as: A. Fontanari, N.N. Taleb, P. Cirillo, Gini estimation under infinite variance, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.02.102

Highlights for review:

- We demonstrate that nonparametric methods are not reliable to estimate the Gini index under fat tails. New Lemma and new proofs for the theorems.
- We show that, under infinite variance, it is preferable to use maximum likelihood based techniques.
- We propose a correction for the nonparametric estimator, when parametric methods cannot be applied.
- The paper contributes, methodologically, to the ongoing discussion on wealth inequality and concentration.
- References have been updated and enriched.