Socio-economic inequalities: Can humans be modeled like atoms?

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Abstract:

"So distribution should undo excess, and each man have enough."

– King Lear, Act 4, Scene 1, WILLIAM SHAKESPEARE (English playwright, 1564-1616)

A brief overview of the data analyses of socio-economic variables – income, wealth, consumption, will be presented. It has been found empirically that the distributions of income, wealth and consumption possess fairly robust features: the bulk is log-normally distributed, followed by a power law tail. The mechanisms leading to such inequalities and invariant features for the distributions of the socio-economic variables are not well-understood. We will also present some simple models inspired from physics (which studies matter and its interactions) and demonstrate how the models can be adapted to study socio-economic 'complex' systems, or explain some of the empirical findings and their consequences.

References

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