# Explicit equilibria in a kinetic model of gambling

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*(Submitted on 19 Feb 2010)*

We introduce and discuss a nonlinear kinetic equation of Boltzmann type which describes the evolution of wealth in a pure gambling process, where the entire sum of wealths of two agents is up for gambling, and randomly shared between the agents. For this equation the analytical form of the steady states is found for various realizations of the random fraction of the sum which is shared to the agents. Among others, Gibbs distribution appears as steady state in case of a uniformly distributed random fraction, while Gamma distribution appears for a random fraction which is Beta distributed. The case in which the gambling game is only conservative-in-the-mean is shown to lead to an explicit heavy tailed distribution.

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|---|---|
| Subjects: | **General Finance (q-fin.GN)**; Mathematical Physics (math-ph) |
| MSC classes: | 91B60; 82C40 |
| Cite as: | **arXiv:1002.3689v1 [q-fin.GN]** |

## Submission history

From: Giuseppe Toscani [view email]

**[v1]** Fri, 19 Feb 2010 09:02:13 GMT (15kb)

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