Karma Economics

Taking its origin in Indian religion, the concept of karma *"what you sow is what you reap"* has become familiar to Western popular and internet cultures.[1] In recent years, however, karma-inspired artificial currency mechanisms have attracted considerable attention in academia since they promise to combine the efficiency of traditional monetary tools with notions of fairness in allocating public resources.

In a nutshell, a *karma economy* consists of a repeated public good allocation game,[2] where agents with an equal initial endowment of a karma currency discover their current valuations and decide whether to access the resources using their remaining budget. The karma spent is then redistributed in a self-contained fashion.

Karma economics differs in two ways from the traditional literature in economics. First, the currency has no value outside the mechanism, and agents have to learn its value through their repeated interactions. Second, while classical economics usually assumes both the *measurability* (do I like chocolate more than apples?) and the *comparability* (do you like chocolate more than I do?) of agents' preferences to define an efficient outcome, karma economics drops the latter assumption and focuses on fairness instead.

In this project, you will investigate one of the many open problems in karma economics. We will have weekly meetings to discuss progress, pending questions, and the next steps.

Requirements: Strong motivation, ability to work independently, and interest in conducting exciting theoretical research. Solid mathematical background (ability to write valid proofs). Although not required, prior exposure to game theory is a substantial plus. Depending on the breadth of the project, coding skills might prove themselves useful. Coming up with your own original ideas is highly appreciated.

Interested? Please contact us for more details!

Contact

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[1] No, really? https://justmeme.org/karma-memes/.

[2] A simple example is proposed here https://arxiv.org/abs/1907.09198. Note that this is quite close, in its general form, to a repeated Fisher Market https://en.wikipedia.org/wiki/Fisher_market.