

## Stanford eCorner

**Virtual Macroeconomics** 

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Beyond serving as the basis for digital currency, the blockchain could be a testing ground for economic theories and experiments, suggests Coinbase CTO Balaji Srinivasan. He thinks of a blockchain ledger as a self-contained economic and behavioral dataset that can be studied all the way back to the initial transaction.



## Transcript

- How does Bitcoin interact with monetary policy? How could function as a currency without a monetary policy? And so what I think is that we are engaged in a grand experiment, which is what I think of as empirical macroeconomics.. So basically, I'm sure I'm going to offend some macroeconomists in the audience, I think of microeconomics as pretty empirical in the sense that you've got the theory of the firm, and venture capitalists are running lots of experiments all the time, and you have a thesis on how a company should be organized or not, and if you're wrong, you lose money.. With macroeconomics, because it involves assemblages of very large numbers of people, it's hard to do reproducible experiments, until relatively recently.. So I actually have these supplemental slides.. Blah blah blah blah blah, I bet every question.. Well actually, being macroecomics, an experimental science.. So virtual economies have been a topic of discussion for about 15 years, where this guy Edward Castronova, smart guy, professor, has been looking at in context of like World of Warcraft and things like that.. And in those kind of economies, you print money.. In Eve Online you print money and you see what the effect is on prices and so on.. And it's pretty cool where you can run experiments with a system of people who are actually trying and responding to incentives..

And what I think is going to happen is that type of work is going to link up with cryptoeconomies and we're going to start to get a lot of real life empirical economic data on what life is like without a central monetary policy in this opt-in kind of system.. And one of the really good things about this is it's like a bonanza for econometrics people because there was the vague concept of six degrees of separation in the late 90s, and then we got this digital data structure of the social network, right? So there was a vague concept of six degrees of separation and then you've got something that was digital and computable.. You could think of it as a graph and so on.. In the same way, we have this sort of vague concept of the economy, now we've got the blockchain, which is the record of every single transaction that's ever happened down to the penny, back to t=0, right? And so every economic theory that one has about transactions or the price support or whatever can be tested.. And importantly, one can also develop blockchains that have inflationary policies, that are connected to central banks and so on.. I think what we're gonna see is just a ton of different kinds of economic experiments: some inflationary, some deflationary, some demurrage, some weird kinds of combinations that resist political classification.. I think we're going to run the experiments, see what happens...