

Discussion of
Some Economics of Private Digital Currency
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¹The views presented here do not necessarily reflect those of the Federal Reserve of Chicago or the Federal Reserve System.

Private Digital Currencies

- ▶ why do they exist?
- ▶ could they become a threat for state currencies?
 - ▶ would the issuer want to make them fully convertible?
- ▶ model is used to analyze these questions
- ▶ focus of paper is on *particular* form of digital currency

Platforms and Time

- ▶ platform is owned by a profit-maximizer
- ▶ platform-owner derives revenue from time spent by users
- ▶ users get utility from **time** spent on platform
- ▶ time has an opportunity cost (wage)
 - ▶ higher-wage earners spend less time
- ▶ allow users to increase marginal utility of time spent with enhancements
 - ▶ enhancements can be bought with time or money
 - ▶ high-wage earners will buy with money, low-wage earners with time
- ▶ time spent increases

Cashing out

- ▶ allow users to sell enhancements back to platform (outward convertibility)
 - ▶ equivalent to increasing the wage for low types
 - ▶ effect is to reduce their direct usage
- ▶ but the earning activity may be profitable for the platform
- ▶ hiring housewives to stare at Facebook ads could be profitable, if wage paid to them $<$ return on ads
- ▶ of course the advertisers would wise up and demand lower fees

Comments

- ▶ virtue of model:
 - ▶ focus on opportunity cost of platform activity
 - ▶ enhancements can be seen as price discrimination between high and low-wage earners
- ▶ not addressed: making the credits transferable between users
 - ▶ key question if these credits are to become a medium of exchange
 - ▶ much confusion on this point:
 - ▶ BCE survey classifies frequent-flyer miles as virtual currency
 - ▶ they are really quantity discounts storable over time

Transferable Credits

- ▶ suppose FB credits are made transferable
- ▶ sellers of goods and services offer them for FB credits: why?
 - ▶ convenient form of payment
 - ▶ somehow customers with this form of payment are more attractive
 - ▶ marketing?
- ▶ what does platform-owners earn from the use of credits as medium of exchange?
 - ▶ advertising revenue
 - ▶ old-style counterpart: suppose banks issue notes with ads on them

Platforms and Currencies

- ▶ platform: “A platform is a business, mechanism or institution that brings together two or more distinct parties (or more generally, groups) for their eventual mutual gain”
- ▶ broad enough to encompass many things!
- ▶ could currencies emerge from platforms?
 - ▶ currency: medium of exchange for a wide array of goods and services
 - ▶ the platform-based currency would have to offer particular convenience
 - ▶ more likely to occur when it was designed for that purpose
 - ▶ Bitcoin (“platform” only in the broadest sense), Ripple