

Internet Cash

Payment Systems in the Internet Age
Global Interdependence Center

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Currency can maintain *anonymity*

Kocherlakota (1998) shows that a public record of all past actions is superior to currency as a record-keeping device.

Kahn, McAndrews and Roberds (2005) posit that public records aid theft and other types of predation; currency eliminates that possibility.

Awaya and Fukai (2015) show that with incomplete information anonymous money can implement outcomes not possible with public records precisely because it limits information revelation.

Will internet cash provide the services of physical cash?

- medium of exchange
- store of value
- unit of account
- anonymity

What is available now on the internet?

	Public	Private
National denomination	Fedcoin, Cadcoin	credit card Paypal, ...
Unique denomination	∅	Bitcoin Monero Dash

Will central banks provide anonymous e-payment?

The legitimate concerns of the possibilities of using an anonymous form of payment for money laundering and terrorist financing make me think that the chances are low.

Will anonymity be provided privately?

We've seen in discussions how pernicious is the leakage of personal information via internet transactions.

What are the options available today?

Some “virtual currencies” such as Bitcoin are pseudonymous, while some, such as Dash and Monero and others are attempting to provide more anonymity.

Liquidity, money, and privacy

It is unlikely that the privately-issued, non-backed instruments, such as Bitcoin, will ever become widely used media of exchange.

They lack liquidity (the chicken and egg problem of adoption) and the advantages that nations have to make a particular currency *legal tender*.

Conjecture: anonymity of internet payments will be underprovided by the private sector.

Providers of internet payment, such as Visa, Paypal, Square, etc. face two impediments in providing sufficient anonymity:

1. The inability to commit not to utilize information gained during a transaction.
2. The usefulness of the information revealed is dependent on a host of related investments made by the parties.

Conjecture: anonymity of internet payments will be underprovided by the private sector--Continued.

An additional impediment relates to the consumer: The information revealed by a consumer in a transaction may have “external value.”

Combined with information about other transactions, it can assist in forecasting demand of other consumers or an individual’s future actions.

In this environment, Coasean bargaining is unlikely to result in an optimal contract, and anonymity will be underprovided.

Conclusion

Currency offers anonymity. This can be valuable to society in a variety of environments, not only in criminal or illicit transactions.

The internet is an information-rich environment because of the ability to collect information cheaply.

The private sector has insufficient incentives to provide anonymity of transactions.

Public authorities have a role in promoting greater anonymity and privacy in Internet payments and transactions.