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Complementary Currency Innovation: Self-guarantee in peer-to-peer currencies

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ABSTRACT

The WAT system, as used in Japan, allows for businesses to issue their own tickets (IOU's) which can circulate as a complementary currency within a community. This paper proposes a variation on that model, where the issuer of a ticket can offer a guarantee, in the form of some goods or services. The difference in value, along with a reasonable acceptance that the issuer is capable of delivering the service or goods, allows for a higher degree of confidence in the ticket, and therefore a greater liquidity.

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Introduction and Statement of Problem

The Wat system (Izumi 2001) is a peer-to-peer complementary currency system initially designed by Eiichi Moreno. It is used in Japan typically to allow for small businesses to issue IOUs (called WAT-ticket) to their suppliers. These suppliers in turn circulate them within an undefined community, until they are eventually redeemed with the issuing business. It was described in detail in a previous ijccr paper (Lietaer 2004). Conceptually, the use of someone's IOU used by others as a medium of payment is not an entirely new concept: during a banking strike in Ireland, Guinness issued cheques which circulated as currency until redeemed in pubs. The main originality of the WAT system is that it is designed as a pure peer-to-peer system without any significant role for a centralized function.

The challenge for the Wat system, and similar peer-to-peer systems, is that the trust in the currency is based in the trust of the community that the business or person backing a particular WAT-ticket is able to redeem the ticket on presentation. This is why the WAT system is most successful in Japan among small, well-established businesses. Indeed, for businesses that are not well-known or for individual people wishing to issue a WAT-ticket, there may be a credibility issue since the second or subsequent receiver of a circulating ticket may not know the credit-worthiness of the issuer.

This has been recognized and one solution is an independent guarantor such as an NGO. For example this is proposed in a paper on implementation of WAT and iWAT (its online version) for rebuilding villages damaged by the 2004 Tsunami. (iWAT 2005)

The current paper suggests an alternative method of guarantee in "peer-to-peer" currencies, which allow the currencies to retain their total decentralisation, including the necessity for any central authority or control.

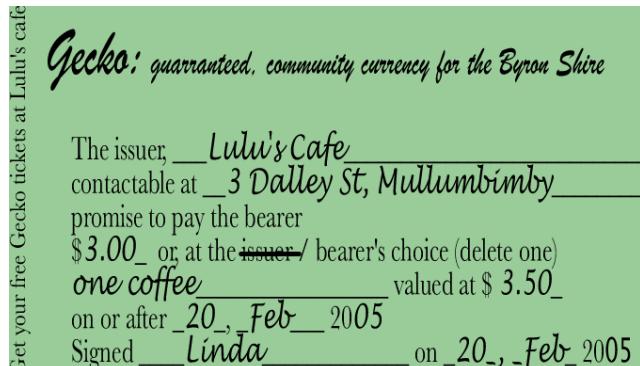
A possible solution

The solution proposed is for the issuer of the ticket to guarantee the ticket themselves,

using some self-selected measure that other members of the community will perceive the issuer as being able to repay.

The ticket would allow for the choice between in-kind guarantee or cash to be at the Issuer, or Redeemer's choice. Normally it would be the issuer's choice, especially if there was a large difference between face-value and the in-kind guarantee value. The lower the reputation of the issuer, or the less universal the service, the higher the difference is likely to be between the face-value and the guarantee. However, allowing the Redeemer to choose increases the liquidity of the ticket, since it can also be treated as equivalent to a discount coupon. Finally, from an Issuer's perspective, this ticket also provides the advantage of bringing in clients that he or she otherwise may not have.

Example 1 – use as a loyalty currency.



for people who might not know the café. It is written in the national currency so that it has an understandable value, and functions at least potentially as a promotion of the business to bring in clients that otherwise wouldn't come.

A café purchases \$60 of coffee beans from a local grower, paying by writing up twenty "Gecko" tickets at \$3 each, they guarantee with a cup of coffee. In this case, they are keen to have the redeemer take the coffee option, as it only costs them \$2 to provide, but leave the choice open to encourage acceptance of the tickets. The ticket provides a contact address

Example 2 – use as collateral for a small loan.



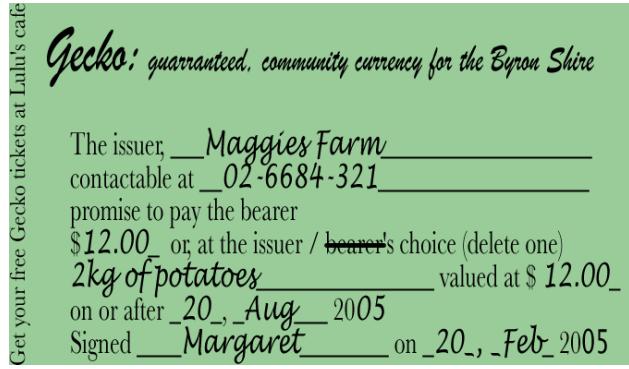
massage. Since this is a loan, he also allows for a month before he has to redeem the ticket, allowing him time to restart his business, and earn the cash.

Roddy needs a new tire so that he could restart his mobile-massage business. He needs a loan of \$30 for a week or so. He writes three tickets at \$10.00 each. Since he is not as well known as the café, he guarantees each ticket with \$20 of massage, but since he doesn't want to be giving \$10 massages he leaves it as his choice whether to repay in cash or with

He writes three tickets at \$10, rather than one at \$30 because smaller units are likely to

circulate more easily. The ticket can therefore circulate among the community before being offered for redemption, at which point the issuer (Rod) could choose to pay \$10, or offer a half-hour of massage.

Example 3 – Use as a crop financing tool.



officially sanctioned by the Massachusetts State Agricultural Department. to provide working capital for some small farmers who sell them against normal US dollars. (Greco 1995). These certificates are redeemable at the next crop against merchandise and produce. A discount is built into the price of this future produce to provide an incentive to the buyer to purchase now what will become available only months from now. This approach was very well received by clients, and enabled the farmer to raise working capital immediately, while ensuring him in advance the sale of part of his crop with reliable clients in the future.

The redemption date also allows for longer term, interest bearing loans, for example if a farmer needs \$1000 to plant potatoes they might issue 100 tickets with a face-value of \$12 each, and a guarantee of 2kg potatoes, redeemable in six months, and then accept \$10.00 for each ticket. There is a precedent of this type of application with the Farm Preserve Notes -

Sign and record the new receiver when you pass this ticket on.

Orginal Receiver: *Mitra Ardron*

Passed on: 22, Feb, 2005
Signature: Mitra
To: Lulu's Cafe

Passed on: 1, Mar 2005
Signature: Linda
To: Bernard Lietaer

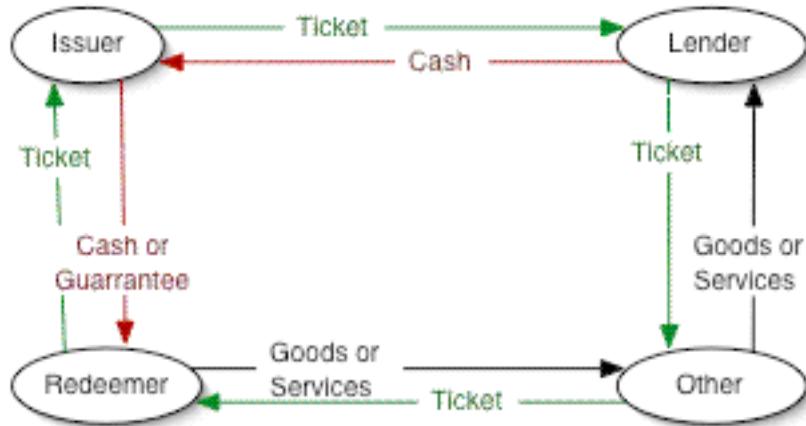
Passed on: 3, Mar, 2005
Signature: Bernard
To: Roddie

Passed on: , , 20
Signature: _____
To: _____

Passed on: , , 20
Signature: _____
To: _____

The rear of the ticket would typically contain a place to list endorsers, as for a Wat-Ticket (Izumi 2001), to record circulation.

The way this ticket would circulate is schematically represented below.



Originality of this Design

This proposed system integrates design elements of two previously existing complementary currency systems, which each have proven effective in practice : Eiicho Moreno WAT's system (denominated in national currency), and the Massachusetts Farm Preserve Notes (denominated in in-kind goods or services).

The originality of this proposal consists in the “double guarantee” (in national currency *and* goods or services), combining both precedents in a single tool. This way, the same system can be used flexibly in a wider variety of ways. This double guarantee should also help in improving the credibility of the paper issued, and therefore help in its liquidity.

Outstanding Issues

Like the Wat system, these tickets cannot easily be counted, measured, or taxed. Again, like the Wat system, not all \$10 tickets are equal. Their worth depends also on the desirability of the guarantee, the likelihood of default, and also the time to redemption.

This system has not been implemented or tested yet, and the authors speculate that such a system would allow for an easier and more secure issuing of tickets by smaller businesses and individuals, thus allowing for a wider participation.

The authors would be interested to hear of anyone who trials such a system.

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