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New Currencies and their relationship with Fiat

by Graham Barnes

Complementary Currencies aim to work alongside the pound or the dollar. Classically they seek to broker exchanges of underused resources with unfulfilled need, and facilitate activity in niches neglected by the mainstream economy. They do much good work and are worthy of support.

Intentional Currency designs on the other hand will generally be grounded in a critical assessment of the way fiat currencies operate, and recognise and seek to remedy or mitigate their dysfunction. In this way they are competitive with fiat. Consequently if fiat currency plays a role in the start-up or continued operation of a new currency, it is appropriate to manage these interactions carefully and to understand the impact that fiat-dependence can have on the currency's development.

This article outlines management issues associated with some of the potential interactions with fiat. It has been produced as a Working Paper as part of the Feasta Currency Group's development of a Charter for Intentional Currencies.

Creating and maintaining a currency without any interaction with fiat is clearly a challenge. It's like asking fish to reinvent water while they are swimming around in it. But if we consider the main forms of interaction with fiat, some clues as to the management of the difficulties may emerge.

Three important fiat-interactions are:

i) access to fiat capital for a start-up phase or for a step-change in the development of the currency
ii) the issuance of currency units in exchange for fiat (fiat-backing)
iii) general exchangeability with fiat

Capital Investment

Most projects need start-up capital, but fiat-friendly projects have the option of repaying investors or contributors in fiat once they are successful. A fiat-cautious project might think twice about this. To some extent this challenge has been successfully navigated by a number of 'Open' projects, at least to the extent that contributors defer any claim on project success until revenue streams flow or until 'satellite' fiat-earning activities are identified.

One attempt at formalising this sort of arrangement is Sensorica's Open Value Accounting (OVA) proposal. 'To distribute value in proportion to everyone's contribution.' [1] The way that value is progressively created and financial rewards ultimately proportionately allocated is peer-controlled via an evolving algorithm. Presented as a P2P-grounded initiative, preserving value-added for contributors and keeping out the evil monetising corporations, it has some immediate gut-attraction.

But it is a little scary. In a thoughtful critique of OVA Lars Zimmermann [2] makes the point that 'Money and especially small sums of it are very good in destroying intrinsic motivation.'. This observation will be familiar to timebank advocates. Monetising a relationship can be a way of de-personalising or de-socialising. In the words of Mark Boyle [3], money… 'creates a kind of disconnection between us and our actions'. So by reducing all relationships within an OVA project to calculations of input-worth and money-output it runs the risk of disabling any lingering intrinsic motivations. Zimmermann's view is that ' intrinsic motivation is a huge driver in the whole open source world! The beauty you can find everywhere in Open Source Hardware is a result of massive amounts of intrinsic motivation.'

Sensorica see OVA as doing away with the power relationships and hierarchies that permeate the corporate world. An opposite view might be that rather than doing away with them, they are being programmed into an automated system. If we believe in the wisdom of crowds, then this may indeed become a superior economic form, but if it can be gamed or if the crowd begins to bully the individual contributor then OVA may become a new systematised and impersonal form of wage slavery.

So the devil will be in the detail. In particular the reputation systems that are designed to mitigate gaming attempts, and the emerging governance regime will be key. Decision making – for example about exactly when to crystallize value and distribute reward – is a tricky P2P area.

In a new currency context, we might anticipate different motivation-mixes (extrinsic / intrinsic) to different contributor-types, or at different stages of a project. A purist Intentional Currency approach might be to restrict any extrinsic motivation to rewards in the new currency itself i.e. to exclude fiat reward entirely.

Once established, an exchange currency can incorporate a transaction fee thereby progressively seting aside currency for subsequent capital investment. Culturally though, this old-fashioned approach of saving to invest later will be challenging to adhere to for a generation conditioned to the normality of debt and averse to deferred gratification.

Issuance in Exchange for Fiat

It is common for complementary currency to be issued in exchange for fiat. Thus a Brixton Pound comes into being in return for the deposit of one pound Sterling. The Sterling thus received is held on deposit, and effectively 'backs' the currency as it can be exchanged (minus a fee) for sterling at any time. This approach clearly limits the risk of the Brixton Pound user but it also limits the additional impact of the new currency.

Advocates of this approach often claim that while the issuance of currency in this way has no effect on the aggregate quantity of money in circulation, the new currency changes hands more frequently, and that increased 'velocity' increases the effective 'local GDP' of the currency area. Unfortunately it is impossible to prove this – any observed velocity effect can be due to moving local transactions (that would have taken place otherwise in sterling) into the new currency, leaving the overall local GDP (sterling + new currency) unchanged.

This is not to deny the positive impact of such currencies as local identity vehicles, nor the value of their signposting of local supply sources.

One alternative to being issued in exchange for fiat is for the new currency to be given or spent into circulation. Exchange currencies do not necessarily need backing but they need users to trust that they can be exchanged for goods and services of value. Such trust is difficult to build. Richard Douthwaite's view was that an 'anchor' good or service was needed at the start-up of an exchange currency to reassure new users of a 'redemption of last resort'. In Feasta's Liquidity Network models this was usually the local authority accepting payment in the new currency for rates, parking and so on. The LA gives the currency into circulation via community groups and charities and/or spends it into circulation via its procurement of goods and services. Over time, as the currency is more widely used and accepted, Douthwaite suggested that this 'guarantee' could be withdrawn, just as the training wheels on a bicycle can be discarded once sufficient velocity is achieved [4]. Again, this model does not necessarily add liquidity. It depends on the recipient channels – their inclination to re-spend and their geolocation relative to the currency catchment area.

The problem with taking a fiat-backed route is that while it eases the start-up, it is difficult, perhaps impossible, to unwind the dependency. The most likely mechanism for an unwind would seem to be a progressive increase of the redemption-penalty – essentially decreasing the exchange rate. But such an apparent 'devaluation' would likely be interpreted as a negative signal, and if detected as a direction of travel could cause a counter-productive acceleration in conversion back to fiat.

Exchangeability in general

If currency units are easily exchangeable with fiat, but not pegged to fiat (via a 1-for-1-ish guaranteed exchange rate), there is always the possibility of a run on the currency driven by speculation or occasional bad publicity. As a currency matures it may in any case be impossible to prevent the creation of exchanges. Exchanges balance supply and demand via the exchange rate, so the overall currency supply is unaffected but an inconvenient level of inflation may occur.

In an analogous situation, the national economies of developing countries have been somewhat disadvantaged by floating exchange rates and 'free trade'. But most of the developed countries achieved their esteemed status with the judicious use of trade barriers and capital controls, so we should not automatically discard these approaches as regressive. Effective capital controls though – introducing some degree of friction in the exchange with fiat – are difficult to imagine, short of a 'Passport to Pimlico' scenario [5].

If exchangeability with fiat cannot be prevented, perhaps it can be featured. Cryptocurrencies, notably Bitcoin, use the fiat value of a Bitcoin as an incentive to the creators and maintainers of the currency. At this relatively early stage of development this speculative value is perhaps reducing the potential velocity of circulation but as incentives switch from mining reward to transaction fee this may sort itself out. The clever incentive structure of Bitcoin is a good example of the 'bootstrapping' strategy needed for any emerging currency to scale.

Conclusions

The approach of an Intentional Currency to its relationship with fiat should be explicitly described in the currency's design statements. The way in which the relationship with fiat relates to the currency's overall intentions (values, outcomes, behaviours) is an important element of the currency, as is the way that relationship might develop over time. Currencies could usefully self-classify as fiat-friendly, fiat-cautious or fiat-averse and document their fiat-relationship-strategies in the relevant amount of detail.

Intentions are worth a close look in their own right. What are legitimate aspirations for an IC's intentions? Is 'local' GDP a legitimate metric? Is increased liquidity of itself a 'good thing'? Where is quality and wellbeing in all this? And can Intentional Currencies hope to bootstrap themselves into existence with mininmal dependence on fiat? In a later article I hope to come back to these questions and to expand on the basic ideas of the Preferenced and Deprecated Domains outlined in previous articles [6,7].

Endnotes

[1]: https://www.youtube.com/watch?v=Ixgp8_B9g5A#t=441 and
http://p2pfoundation.net/Open_Value_Accounting
[2]: http://bloglz.de/open-value-networks-a-panopticon-for-makers/
[3]: https://en.wikipedia.org/wiki/Mark_Boyle_%28Moneyless_Man%29
[4]: Caroline Whyte advises me that: "..it seems that training wheels have fallen from grace now -the big thing is 'balance bikes' as they help the child to get used to balancing and to learn

countersteering before they have to worry about pedalling. Almost all the children I know who are 8 years old or younger learned to ride a bike that way. Perhaps there's a way to use a balance bike analogy instead? What would be the alternative currency equivalent to countersteering I wonder?"

[5]: A 1949 Ealing comedy in which Pimlico declares independence https://en.wikipedia.org/wiki/Passport_to_Pimlico

[6]: http://www.feasta.org/2013/11/19/designer-currencies-and-the-preferenced-domain/

[7]: http://www.feasta.org/2014/07/10/the-deprecated-domain-the-pros-and-cons-of-designed-exclusion/

About the author

Graham Barnes is a Currency Designer. @GrahamJBarnes He is a Member of Feasta's Co-Ordination Group and co-organiser of the Feasta Currency Group. He holds a PhD in Computer Science and worked at a senior level in IT and online marketing in a previous life. His current projects include the detailed design and delivery of currencies to be sponsored by a local authority; by a social entrepreneur to complement and enhance a well established sustainability methodology; and by a restaurant chain.

Feasta is an open-membership-based think tank founded in Ireland in 1998. It aims to identify the characteristics (economic, cultural and environmental) of a truly sustainable society, articulate how the necessary transition can be effected and promote the implementation of the measures required for this purpose.