

Towards a Quality Financial Commons?

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Abstract

Peer-to-Peer technology has produced disruptive outcomes in media distribution, knowledge creation and even money lending. Also open source software powers much of the Web. What binds these advances together is a commitment to decentralisation and opening of the social structures that produce the quality outcomes we all benefit from. The question I want to ask is: Can we extend these trends to provide the functions of financial institutions? Put simply could we envisage a peer-to-peer open source bank or money system? Is this a viable and desirable project and what would we need to do to bring it about?

The tragedy of the financial commons

Recent events have shown that systemic failures in global financial systems can affect everyone - even through this, arguably, results from the actions of a minority of participants. In this sense certain financial services, it could be argued, represent a kind of “financial commons” that can be run well for the benefit of all or poorly for all – although perhaps benefiting a few in the short term.

One response to such a dilemma – during a systemic failure – is to give increased central control to institutions that can recalibrate the system and impose regulations to suppress practices leading to failure. This approach presupposes beneficent and wise central agencies with the ability to understand and control the system for the common good – a *Hobbsian Leviathan*.

Another approach is to decentralise and deregulate financial services such that market mechanisms can self-organise the system efficiently for the common good relying solely on self-interest. This approach is based on the neoliberal assumption of efficient markets and rational action – so-called *Homo Economicus*.

A third approach, that may become possible in the future by using emerging information technologies, is to radically decentralise financial services such that they can self-regulate and self-organise without relying on assumptions of efficient markets *or* beneficent central control.

Old ideas new technologies

This third approach is an old idea and aspects of it can be seen in mutual societies, local exchange trading systems and cooperatives. What is new is that emerging technologies such as cheap global networks, powerful mobile devices and social software provide low entry cost infrastructure allowing people to interact globally in complex social ways. Combining these developments with new socio-economic models of bottom-up self-organisation from evolutionary and experimental economics, complexity science and computational social science, could lead to qualitatively new possibilities. For example, traditional approaches based on physically localised interaction and trust have tended to lead to small scale associations but could be radically scaled-up globally with the right technological

tools. For example, see recent experiments such as CoachSurfing¹ and Freecomony² that eliminate money or barter from exchange of services.

Over recent years a number trends have emerged within information systems: social networks, peer production, peer-to-peer systems and virtual currencies. In each of these areas, agents, be they human or computational, coordinate and cooperate collectively to achieve common goals in radically decentralised ways. Interestingly the mechanisms that support such collectives do not appear to rely on orthodox economic models or high levels of central control but rather harness bottom-up forms of altruism, reciprocity, trust, affinity and reputation that limit the potentially negative effects of selfish behaviour over common resources.

A fully decentralised credit system

One interesting idea is to radically decentralise and open the credit system by allowing individuals to create credit networks based on their existing trusted social relationships. Technologically it is possible to provide tools that could support such networks without the need for central control or administration. Practically this would involve individuals accessing a kind of electronic ledger stored on their mobile device or home computer that would contain a social network of trusted others with some credit limited applied to them in some units of exchange. Such an infrastructure could, in theory, support value transfer between arbitrary individuals assuming a sufficiently connected network of credit between them. An open source project, now dormant, called Ripple³, provided experimental infrastructure for this. This can be compared to the ancient Muslim system of value transfer known as Hawala⁴ which, still in use today for global value transfer, is based on strong existing trust relationships centred around regional / ethnic ties of various diasporas.

Interest free open source banking

Another possibility could be the creation of open source banks in which the entire infrastructure and business logic of the bank is publically available allowing for transparency and scrutiny. Clients of the bank could exercise ownership and control in a technologically mediated democratic way. Such an aim may appear fanciful but one can compare recent trends such as the Zopa⁵ peer-to-peer lending system or JAK Bank⁶ the interest free members bank.

Self-organising socio-economic theory

In order to understand processes that work and to engineer tools that harness and support such systems it is necessary to draw on socio-economic theory that is neither market based (at least in the neoliberal economic sense) nor centrally policed and controlled. It would seem that models from complexity science and computational social science, which capture bottom-up self-organising and self-policing processes, could provide a basis for such theory. In addition the deployment, experimentation and testing of, distributed social tools provide the ability to rapidly collect real data informing new theory and experiments.

¹ <http://www.couchsurfing.org>

² <http://www.justfortheloveofit.org>

³ <http://ripplepay.com>

⁴ <http://en.wikipedia.org/wiki/Hawala>

⁵ <http://zopa.com>

⁶ http://en.wikipedia.org/wiki/JAK_members_bank