## CoFi - High-Level

The Collaborative Finance (CoFi) subfield emerged as a generalisation of two specific services: mutual credit and obligation-clearing. From our experience with these two practical services in the trade credit market the following defining features of CoFi can be extrapolated:

- From a financial point of view CoFi focuses on the provision of working capital in the real economy rather than of investment capital in the financial or real economy.
- From an economic point of view CoFi prioritises the function of money as a medium of exchange over money as a store of value.
- From a mathematical point of view CoFi is neutral about the function of money as a unit of account
- From a legal point of view CoFi is neutral about the function of money as a means of final payment.
- From an anthropological point of view CoFi is built on the wider definition of economy that economic anthropology
  provides, where Economy is composed of four domains of value: market, capital, social relationships, and the
  commons.
- Therefore, from an economic theory point of view CoFi prioritises and facilitates the expression of value embedded in the social capital of networks of firms operating in the real economy over and beyond the value generated by the individual selfish rational agents of neoclassical economics.
- From a philosophical point of view CoFi prioritises the ontology of money as a social relation of credit and debt over its nature as a precious commodity.
- From a political theory point of view CoFi assumes that money is not a neutral instrument. Like all technologies it embodies cultural values and political choices.
- Therefore, from a wider social constructivist point of view CoFi aims to design money as a recursive social construction that is different from money-as-we-know-it and that, because of how it is designed, gives rise to more sustainable and equitable institutions.
- From a sociological point of view CoFi, while still necessarily relying on the safe harbour of trustless technology
  assumptions, also pushes off into the risky and choppy waters of trust-building: CoFi services require a certain
  level of trust to get started, but then reinforce that trust.
- From a political economy point of view CoFi disintermediates monopoly-holders (e.g. banks and corporations) in a given socio-economic context and enhances the market power of the weakest economic actors.
- From a political science point of view CoFi requires complete transparency from the service provider(s) and actively encourages the development of a participatory, bottom-up governance process by its users.

For <u>mutual credit</u>, CoFi follows the design parameters of the <u>Sardex system</u>: distribution of the power to create money from banks to individual firms, i.e. focus on networks of small firms with the power to issue their own multilateral debt (IOUs) towards the network as credits backed by their productive capacity in the real economy; local spending-only and non-convertibility constraints to protect the presence of a medium of exchange in weaker economies at the margins; zero interest on all balances to stimulate spending of positive balances and not penalise negative balances that have 12 months to recover their debt; network-wide aggregate ratio of backing (productive capacity) to debt (credit lines) approximately equal to 5/1 (i.e. overcollateralized) to provide stability and insurance against the tragedy of the commons; standard "circular" creation and destruction of the monetary mass that results from the definition of money as debt and that, therefore, "breathes" to follow the needs of the real economy.

Although mutual credit is the best kind of money ever invented, it does not scale well because it is strongly linked to local social relations. Here is where <u>obligation-clearing</u> (multilateral trade credit set-off, or MTCS) can help. MTCS consists in building an obligation graph out of the invoices received by a set of firms, finding closed cycles of invoices in the graph, subtracting the smallest invoice amount from each cycle, and sending legally binding set-off notices to the affected firms to inform them of the amount of debt saved. Payment of the remainder of their obligations remains the responsibility of each firm. MTCS has large macroeconomic implications, on the order of several percent of GDP in most economies in liquidity saved. It requires a certain level of trust in the service provider for the firms to share their debts. After the clearing the firms realise that the debt reduction could not have been possible without the pooling of their invoices, which reinforces the perception of the importance of a collaborative approach.