Complementary Currency Systems

Social and Economic Effects of Complementary Currencies

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Preface

In this report you will find the result of half a year research in complementary currencies. The results are a summary of an extensive literature review, informal conversations and qualitative interviews with practitioners. For a time we have delved into the world of complementary currencies: a world characterized by multiple visions, collaboration, knowledge sharing and discussion. We are very grateful to everyone we have met during this period.

In particular, we want to thank Edgar Kampers and Rob van Hilten (Qoin) and Henk van Arkel and Jaap Vink (STRO), for their hospitality, openness, patient and good discussions.

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Do not hesitate to contact one of the authors, for questions or discussion on the content of the report.

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A new economy?

Money is the fuel of modern economies. Money is a tool, with which we can trade and calculate. And we can save it. All this makes it useful. On top of this, money can 'bind' people. This latter purpose European leaders also envisioned when introducing the euro: the euro would not only facilitate trade but would also bring Europeans closer together.

But money can also generate problems– like when there is too little of it, or too much. Or when the financial system is derailing(like now), or when currency needs to be managed in tough circumstances (as is the case now with the euro).

When the size and number of problems grow, as we see happening in the western world at the moment, doubts about the existing monetary system grow just as well. Is the monetary union with many countries working as it should? Isn't managing the currency too costly? Don't the Europeans have to make too many democratic and social concessions? And is the euro actually driving us apart instead of functioning as social cement?

Another doubt concerns the relation between modern money and debt. Money as we know it mainly comes into circulation because firms, individuals and the government are willing to incur debt. With that debt come interest payments. The size of the piles of debt generated that way is shocking. Would the creation of money be conceivable without the concurrent creation of debt.

And would money be of equal importance in our lives, then? Aren't we using money too much as a way to make calculations? Are we attaching too much value to it?

A money shortage hampers growth and prevents wealth accumulation. Liquidity deficiency is a sign of crisis, such as it was in Argentina in 2001 or in Greece nowadays. Consumers don't have sufficient income to satisfy their basic needs, leading to an earnings drop for firms. Is there no solution? And when an exchange doesn't happen because there is no money available, although both parties do want to trade, could the exchange happen in some other way?
Also in healthy economies we might wonder why there is no viable alternative to the euro or dollar. Currencies stay anonymous. You don't know how they originate. Is there no alternative currency to bind groups of people or certain communities?

Rethinking the monetary system and designing new currencies are part of what is called "The New Economy". Plenty of organisations commit themselves to this project, like the New Economics Foundation (NEF), the Institute of New Economic Thinking and the "Economy Transformers" in The Netherlands. The underlying thought is that when western economies find themselves in serious crises, a fundamentally different kind of thinking is required. The current system with measurements in terms of GDP, income, profits, shareholding and international money arose in response to the crisis of the 1930s. We could say it might be

time for a different kind of system. And that system needs to be invented.

A part of thinking about another economy is thinking of another kind of money, and mainly a system complementary to our current currency. Two organisations in The Netherlands, STRO and Qoin, play an important role in thinking about and the design of new complementary currencies. STRO has specialised in the development of digital technics enabling financial reforms. Qoin is a consulting agency and co-developer of multiple complementary currencies.

Our research

With this research, enabled by Stichting DOEN, we have investigated the effectiveness and efficacy of complementary currencies. We have attempted to evaluate the functioning of De Makkie in the Indonesian neighbourhood in Amsterdam. We have travelled to the United Kingdom and United States to evaluate the mechanics behind complementary systems in those countries. We have analysed the technical systems and infrastructure and have scrutinised the juridical and fiscal aspects of complementary money.

Next to this we have studied the relevant literature and have made use of the cultural economic perspective currently developed at the Erasmus University Rotterdam. An extensive report can be requested.

Complementary currencies: the potential

Complementary money could be a tool for change in the economic and social domain. It can stimulate the exchange of goods of individuals and firms that, without that alternative money, wouldn't occur. An additional means of trade can contribute to a strong and resilient economy. Complementary money has the potential to strengthen local communities, by enhancing relationships, and offering an alternative reward for services, and by enhancing a local identity.

Complementary currencies: the practical case

Planning and implementing a complementary currency is not easy. Someone or a specific organisation needs to design the money, and bring it into circulation. People and firms will have to use the money, and preferably continuously, to make it effective. A clear set of rules, agreements and technique is required. That technical aspect is especially essential when digital money is used. A currency therefore requires constant maintenance and supervision. In case the national currency is a dominant actor, much energy, effort and resourcefulness is essential to give the new currency the necessary attention. A currency that is not constantly used, will not work.

Organising complementary currencies

A monetary system could be designed in different ways. You could make choices about form, issue type, rules (think of interest rates, or even a negative one), ways of payment, exploitation area, coverage, etc. All these choices together make up the 'currency design'. Not every currency design is equally useful for a region or domain in society. A money system with high interest rates is not suitable for a region where the size of money in circulation should be increased, while in economically strong regions high interest rates could be used to counter inflation. Hence, different domains in society ask for different money systems. The challenge is to design the currency system in such a way so that it supports the pre-set goals.

.

Playing field

Who uses complementary currencies?

Grassroots initiatives

The first group exists of people setting up a monetary system within their own community. The group is mainly comprised of social activists, idealists and visionaries. Virtually everyone is working on a voluntary basis. People are motivated by their dissatisfaction with the capitalist system and the power of financial institutions, and want to make room for a societal change. Other actors want to strengthen their local community. Often charismatic leaders are at the core of such initiatives. Generally, these players possess a lot of social capital but have only limited financial funds. Initiatives of this group often remain small.

Commercial firms

Commercial parties occupy themselves with complementary money in two ways. Some participate in the commercial barter industry. Entrepreneurs in this group establish complementary currencies as a business instrument to increase profits. Especially in the United States the barter industry is well developed. In Europe only a small barter industry exists.

introduction - playing field

Next to the barter industry individual firms engage in the creation of complementary currencies, such as Air Miles and Facebook credits.

Non-profit sector

The non-profit sector includes foundations, knowledge centres, governments and NGOs. The motivation of the actors in this group is more idealistic than it is commercial. CCs serve as a tool for societal (both social and economic) changes. There are many bilateral relations; there is an active exchange of knowledge to make progress. In The Netherlands, STRO and Qoin are the most prominent players in this group. The actors possess a lot of intellectual capital in expertise and experience. They have some financial assets, but these are relatively small, giving rise to a dependency upon subsidy and other funding.

IT

The IT sector is a last group quickly forgotten among the CC players, consisting of programmers, hackers and digital specialists. The IT experts devise complementary currencies in their own communities. Bitcoin is the most famous example. Computer programmers explore the possibilities to set up a currency for own use or on commission basis. Members of this group are often driven by a technical or ideological fascination. Community members account for the development of much technological progress in complementary money.

Thinking in different logics

How to approach the complementary currencies? Before we proceed with our evaluation, it is important to put the currencies in a context: how do we 'perceive' them?

The logic of the market

Money serves as a medium of exchange between people and firms. This exchange takes place in the market, which has its own specific logic. It dictates that money and services be priced in terms of money, and that trade takes place in equivalent terms, like a sum of money that exactly matches that price. All involved parties are seeking to maximise their own benefit.

In the logic of the market a complementary currency serves as an additional medium of exchange. Its effectiveness is measured by a wealth increase of participating individuals or increase in firm turnovers. When we evaluate a CC through this logic, we analyse the circulation velocity, supply and demand of goods and services, number of users and their spending patterns.

introduction - different logics

The social logic

In the social sphere, the market characteristic of quid pro quo (tit for tat) is less pronounced. This logic is about reciprocity (I do you a favour, and next time you do something for me regardless of whether it exactly offsets that first favour).

Most of the time, CCs have social goals. The purpose in this logic is that a new currency will strengthen a local community. When we evaluate a complementary currency through this logic, we ask ourselves if the social objectives are realised. We look at the sense of belonging to a community, extent and depth of new relations, self-esteem and ownership.

Logic of governance

The currencies will also need to be evaluated for their design and quality of implementation. This is done through the logic of governance. This logic dictates that an individual or organisation is responsible for a currency, that supervision is present (or not), that juridical and fiscal matters are sorted out, that there is adequate technical support (amongst which a proper user interface), and that a clear and effective strategy is present for implementation and continuous usage. Who is responsible, what is the currency's design, what are the conditions and rules, how well are juridical and fiscal implications thought of?

Within the logic of governance, we should look for "best practices". What is needed in order for a currency to be successful? It will become apparent that the biggest challenges are to be met here.

Results

What have these money systems contributed?

We describe the result of several currencies using the following categories:
- **Currencies with social objectives**
- **Currencies with economic objectives**
- **Digital money systems (electronic & virtual money)**

Money systems with social objectives
Time Bank

Currencies with social objectives aim to intensify underlying relations within a community, increase sense of self-esteem, offer a perspective and development to vulnerable groups, and fight social isolation. Social currencies try to activate reciprocity within a community. They work in domains where the regular currency can't be found and try to encourage participating in the informal economy.

Monetary systems with economic objectives
LETS - Barter networks - C3 – Regional currencies

These currencies aim to stimulate the local economy, strength the position of medium sized companies relative to large multinationals, support local regions in absorbing global or national shocks, diminish leakages from poor to richer regions, issue less expensive loans to entrepreneurs in poor areas, fight poverty by realising extra liquidity in underprivileged regions and increase economic diversity.

introduction - results

Digital money systems (electronic & virtual money)
SMS money systems - Online payment platforms -
Peer-to-peer money systems – Conditioned money

Digital money systems have their own logic; they mainly support economic goals. We should make a distinction between electronic and virtual money. In the case of electronic money the value of one unit is denominated in the value of one unit of legal tender. Virtual money is not directly linked but can have an exchange rate to legal tender (Bitcoin is an example).

Digital money systems do not have one clear objective, but are rather a form of money. These systems become increasingly popular and serve as a proper alternative for the regular monetary system, with both fiscal and juridical implications.

Results

We will now present several complementary currencies and will summarise our findings. We will evaluate the operation of the currency in the different logics. A more detailed report with description, analysis and evaluation is available on request.

Time Banking

grassroots initiatives – non-profit

money systems with social otbjectives

In a Time Bank, participants provide services in exchange for hours. Every hour is equal; an hour of a solicitor's advice is equal to an hour of cooking lessons. The amount of hours provided is equal to the hours acquired. Most Time Banks have between 100 and 200 members. There are bigger Time Banks, like the Time Bank in New York (VNSNY) with more than 2900 supporters[1]. Time Banks could be designed following either a bottom-up or top-down approach.

In the US, there are some 256 Time Banks, where money is called Time Dollars. In Europe, there are some 1000 active Time Banks; Asia has 391, mainly focusing on informal care for the elderly (Seyfang & Longhurst, 2012).

Market

— Often seen services are: lessons in using Adobe Photoshop, transport, cooking lessons, website construction.

— Low circulation velocity of money in most Time Banks. Many non-active members.

— Spending hours is harder then earning them.

— Often users do not register the transactions because the exchanges are based on reciprocity.

— An example of larger Time Banks is 'the Elderplan', a programme aimed to facilitate living at home for the elderly. In this Time Bank, some 7000 senior citizens participate, and some 150,000 hours have been 'provided' (research department MJHS)

— In the Time Banks in the UK participants state that 42% of the transactions would not happen without the Time Bank (Seyfang, 2002).

Social

— Time Banks often have a small but active core of participants.

— Active members say that they do more voluntary work, have acquired new skills, and made new friends, than before they joined the Time Bank.

— Participants see their self-esteem growing after joining in, as their qualities are recognised and appreciated.

— Time Banks reach out to more groups than just traditional volunteers, such as youth, ethnic minorities, people with mental problems, and elderly.

— There is a relation between joining a Time Bank and a decreased demand for medication amongst members. Members of a community suffer less from depressions, loneliness and anxiety (Harris & Graig, 2004).

— Social impact affects a relative small group.

Governance

— Bottom-up Time Banks have a large social impact on a relatively small group.

— Members of top-down professional Time Banks show less commitment and have less shared ownership. Social impact is more spread out over a larger group of participants.

— Shared ownership is a crucial factor in commitment and activity of participants.

— Appreciation and reciprocity have more impact on the level of commitment than does for example the supervision of personnel on the payroll (Boyle, et al. 2006)

— A Time Bank needs sufficient sustainable financing. Aforementioned Time Banks VNSNY and Elderplan both have continuously external financing.

— The focus of a Time Bank is crucial in the effect on the total community or members of that community. When only personal chores and favours are performed (like Photoshop courses), the impact on development of the total community is likely to be significantly smaller.

Agency Time Credit

non-profit

money systems with social otbjectives

Agency time credit (ATC) aims at making Time Banks more professional, so they can be used as a policy instrument. The Welsh organisation Spice[2] has developed agency time credits. In this model, participants can earn credits by performing a service for a societally oriented organisation (time-in). The currency could be cashed-in at one of the local entrepreneurs, like the swimming pool or cinema (time-out).

Spice has currently implemented 15 agency time credits programmes. De Makkie in Amsterdam is the first agency time credit programme in The Netherlands.

Market

— Through the implementation of multiple Spice models, the number of active and participating Welsh citizens rose from 278 to 2981, between 2005 and 2008 (Blond, 2007).

— On average, people will always earn more than they will spend. De Makkie showed a cash-in ratio of 15%. Other spice currencies have a cash-in ratio between 40% and 60%.

— Spice models always focus on attracting new volunteers. In the implemented programmes, the ratio has always proven to be 25% (in relation to new volunteers).

Social

— More than 500 young people actively participated in the Bettws programme, bringing back crime with 17%[3].

— Agency time credit focuses on community activity. It has more impact on the total community than a traditional Time Bank.

— With the implementation of agency time credits, new groups organising community activity arise.

Governance

— Top down organisation, with a strong focus on community empowerment.

— Integration in the community is absolutely crucial, otherwise participants might resist, impeding the realisation of the currency's goals.

Makkie

money systems with social otbjectives

An extensive report on the Makkie (Dutch) is available on www.klamer.nl. *'Hoe gaat het met de Makkie in de Indische buurt'*. Setting up a Agency time credit programme requires some time and at this moment it is too early to measure the impact of the Makkie reliably. However, we could say several things about the progress so far.

Market

— In one year, 2040 Makkies are earned, 288 Makkies are redeemed (March 2013).

— Popular redemption partners are the swimming pool, ice cream at a local event and discount at the grocery store.

— Cultural redemption partners are less popular.

— 85% of the earned Makkies have not yet been cashed in.

— The Makkie is more popular with children than adults.

Social

— Support for the Makkie in the district can be found: citizen's initiatives are generally fond of the project.

— The Makkie is especially used by existing initiatives

Governance

— The Makkie has been implemented, but lacks proper adoption. A sense of ownership is amongst the residents missing.

— After a top-down implementation, resistance amongst residents arose. After a year, this feeling of resistance has faded.

— The implementation of a currency is not enough to really motivate people. Human effort is always needed to make a currency function well.

Evaluation on social currencies

Summary of our evaluation on social currencies

_____ Grassroots initiatives have a significant impact on a relatively small, yet active, group, and have the power to create a loyal circle of volunteers.

_____ Professionally organised Time Banks have the potential to be bigger and thus have a more intense social impact, but lack participant's ownership. Continuous external financing is required.

_____ Both Time Banks and agency time credits have many non-activmembers.

evaluation on social currencies

_____ Introducing a platform is never sufficient on its own. People are needed to continuously stimulate exchanges within a Time Bank (either volunteers and paid workers).

_____ Paradox in the governance sphere: working with volunteers can generate ownership and commitment in the community; yet volunteers can suffer a burnout. In the case of paid staff, human resources are continuously available but problems of disengagement and lack of commitment could arise.

_____ Time Banking is about community building. It is an instrument subsidiary to the capacities of the community. Appreciation and recognition of the community play a crucial role in making a Time Bank successful.

_____ Spending is always harder than earning. Many units are saved up.

_____ In a community reciprocity is much more powerful than exchange. A social currency is introduced to show how reciprocity works. When social relationships are developed, members do not use the currency to exchange anymore.

_____ Mutual relationships originate from personal contact and community activities. Social currencies that include more social activities such as movie nights, dinners and excursions, will generate more loyal members.

_____ When setting up a Time Bank, make sure to invest in a good team consisting of social workers. This is a more important element than the infrastructure.

LETS

grassroots initiatives

money systems with economic objectives

LETS are often perceived to be the starting point in the development of complementary currencies. The model is relatively simple: participants join, sign up to an account and use an internal currency to exchange goods and services. Participants could have a positive or negative balance, corresponding to the goods they have acquired or given up. The sum of all positive and negative balances should equal 0. This model is called mutual credit.

In the 1980s, LETS gained more popularity in Europe and Asia. In Europe there are more than 1300 LETS (Seyfang & Longhurst, 2012). This is different in the US, where the currency stood no chance owing to strict fiscal laws. In the previous years the amount of LETS is declining, as they do not produce the desired result.

Market

— Market supply is one-sided and is dominated by luxury goods such as organic marmalade and services like babysitting and computer help (Aldridge & Patterson, 2002).

— People who participate with idealistic motivations rarely use the currency.

— More than 50% of the participants never uses the currency (Caldwell, 2000).

— In many LETS, the circulation velocity has stagnated over time.

— LETS is a reflection of the economy. ‘Popular’ members hoard units. These participants leave the network when disappointed by spending options.

— Spending is harder than earning credits.

Social

— LETS is popular with (idealistic) politically left-wing oriented people (Caldwell, 2000).

— Participants make new friends, however, this is limited to a small group.

Governance

— LETS are organised by a small group of committed volunteers. Often motivated by a charismatic leader.

— Heavy administrative workload, volunteers who lead the LETS might suffer a burnout. Due to a lack of external financing, a major part of the LETS is not sustainable.

— LETS has a reasonable impact in the field of complementary currencies. Many lessons are learned for future currencies.

Barter networks

commercial firms – non-profit

money systems with economic objectives

Barter networks also have a mutual credit currency design. Businesses join a network and use an internal currency. Members pay a membership fee and a transaction levy in the regular currency units. The total balance of all participants should equal 0.

Currently, some 750 barter networks are registered worldwide, with a total of 400,000 members. The main share of these networks is based in the US. In Europe, the barter industry is less well developed. The International Reciprocal Trade Association (IRTA)[4] unites some 350 barter networks.

Market

— Participating businesses experience a stronger economic position: attracting new customers.

— Barter networks are suitable for products with a high profit margin (like services). Products with a low margin (food, electronics) are less suitable as it proves hard to cover the commission fee.

— The Swiss WIR has countercyclical features. When GDP drops and unemployment rises, WIR turnover shows an increase (Stodder, 2005).

— With the focus on daily expenditure instead of luxury goods the currency can have a stabilising effect on participating businesses in times of economic downturn.

— In the long run, the barter industry works procyclically, and grows in trend with the macro economy. A longer downturn in the economy does not necessary benefit barter networks, as fewer firms are able to pay commissions, more bankruptcies an entrepreneurs show a more conservative attitude.

— Visa versa the barter industry has a negligible effect on the macro economy.

Social

— Professional loyalty to other entrepreneurs in the network.

— No new relationships between entrepreneurs, as transactions are of business nature.

— People are more generous spenders when spending barter credits. Examples include lunches for personnel and gift cards.

Governance

— Money systems with an internal financing mechanism, through membership fees and transaction commissions.

— Largest share of the barter industry exists of commercial organisations. Some examples of cooperative barters: WIR[5], Trade Authority[6].

— Internal culture and ownership is important for a well-functioning currency (see box organisational structure).

Organisational structure

Most barter networks in the United States have similar organisational structures. They are privately owned, and have a broker and sales department. A broker mediates in and facilitates most transactions. Only few barter networks have a different structure of a cooperative nature. The Swiss WIR is the largest cooperative barter in the world. TradeAuthority has founded 6 of such networks in the US. Costs for running the networks are covered by levying commissions on transactions. In practice, some traditional barters try to sell as many products as possible. Commercial barters aim (by using selling tactics) to increase the circulation velocity of the currency, in order to receive more transaction commissions. This strategy does not always have the best consequences for the network and its members.

The importance of ownership in using a currency

Nature	Members	Transaction volume	Member average	Commission
Traditional barter	1600	T$ 8 mln	T$ 5,000	13%
Traditional barter	900	T$ 3.6 mln	T$ 4,000	12%
Cooperative barter	600	T$ 8 mln	T$ 13,300	6.5%

Table: 2012 statistics of barter networks in the US

In traditional barters some 80% of all transactions are brokered, and an active sales team has the task to attract new members. Many traditional barters cover the market for luxury goods (restaurants, hotels, holiday resorts). Most cooperative barters, however, focus on daily expenditure. Expenditures of around 50 euro form the fundamentals of this money system. In some examples of cooperative barters, only 10% of transactions is broker-mediated. As a rule of thumb in taking decisions in a cooperative, one might ask: what is best for the network? This increases ‘currency confidence’ amongst members. Consequently, members of a cooperative barter take more responsibility in using the currency, increasing the speed of circulation.

Barter networks as a community currency

Barter networks can be used as an instrument for economic innovation if they fulfil certain requirements. The focus on everyday regular recurring expenditure will strengthen the position of medium and small sized firms. The fact that these networks are better at facilitating services opposed to hard goods could turn out to be a limitation. What follows is that not product is available in the network. Lower transaction fees can increase the availability of hard goods in the network.

Barter networks with day-to-day recurring expenditures in contrast to incidental luxury product purchases, have counter-cyclical effects on the macro economy. When the economy is in a downturn, people demand less luxury products, also in a barter network. As many barter networks in the US focus on these luxurious goods, they do not affect the economic position of firms much. On the contrary the WIR in Swiss has a counter-cyclical effect on the macro economy. Luxury goods do not have to be prohibited completely. A quota in the network would work sufficient. A barter network as community currency has an important cash saving function.

Commercial credit circuit (C3)

non-profit

money systems with economic objectives

C3 is developed to strengthen barter networks as an instrument for economic renewal. Adding the possibility to convert C3 units to any regular currency (euros, dollars) would increase complementary currency support amongst firms. Firms of average and small size that join the C3-network, receive C3 credit to make payments within the network. The limit of this credit is determined by future purchases of customers. C3 units expire after a set time, after which they can be converted to a legal tender. Firms could decide to have their C3 money converted before this date, but will have to pay an interest rate in order to do so.

C3 has started as a small-scale project in Latin America. There are currently two pilot projects in Uruguay, one for cabs, and one for student meals on university campus.

Market

— The currency Compras in Brazil is a benchmark. This network has lasted 6 years, consisted of 2500 firms, and accounted for a trade volume of 60,000 real[7].

— In collaboration with Credomicro, Comprass has issued C3 credit to about 1000 firms.

— Important lessons can be learnt about interest rates. Initially, participants converted their C3-units before expiring date to legal tender. The interest rate they had to pay was written off as normal transaction costs, as is the case with for example ordinary credit cards.

Social

Governance

— C3 has been implemented in pilot form in several Latin American countries. The pilots have yielded results suitable for further development. For example, the break-even points for which people were indifferent between purchasing outside their own area. (The outside region discount had to be 35%).

— The software Cyclos is being developed and tested within those pilot projects.

— In 2012, there were plans to start a nation wide C3 network in Uruguay. It did not proceed due to bureaucracy.

Regional currencies

grassroots initiatives – non-profit

money systems with economic objectives

Regional currencies can only be spent in a certain region, and are often backed by a legal tender. In most currency designs, consumers convert the legal currency to regional money. This currency can only be used as means of payment with certain companies. The firms can then spend it at other participating firms, or convert it back to legal tender against an interest rate.

Famous examples are transition currencies in the UK and Regiogeld in Germany. Ithaca Hours[8] and *Berkshares*[9] are American equivalents.

Market

— Regional currencies are not an additional medium of exchange but redistribute existing money flows.

— Infrastructure plays an important role in transaction size. Pay-by-text associated with the BrixtonPound lead to a payment increase of B£30,000 (Woolf, 2013).

— A bonus of 10% is too small triggering consumers to use the new currency.

— When businesses are not presented with enough possibilities and ways to spend the currency. They convert the currency back to legal tender and write off a 10% penalty fee as marketing costs.

— Most regional currencies function a loyalty programme. The currency is used mostly by already existing customers (Ryan-Collins, 2011).

Social

— Important role in the visibility of complementary currency (by paper money).

— Regional currencies have received ample media attention, aiding consciousness in the complementary money debate.

— Reputation of regions and districts has improved.

— Many currency users are driven by an ideological motivation. These users are mostly middle class natives (Ryan-Collins, 2011).

— Regional currencies serve as a communication tool: users feel part of the ‘resistance’ against the current money system (Thiel, 2012).

Governance

— Participation of local governments generates regional currency ‘injection’. E.g.: Year salary of mayor BristolPound[10] and salary employers BrixtonPound[11].

— Participation of local governments will lead to more spending options. E.g.: Entrepreneurial tax on BrixtonPound.

Transition Currency in circulation

	Launch	Volume	Firms	Population
Totnes	March 2007	5000	70 (2008)	8.000
Lewes	Sept 2008	15.000	130	16.000
Stroud	Sept 2009	4.329	37	20.000
Brixton	Sept 2009	30.000	140	65.000

Source: Ryan-Collins (2011)

The future of regional currencies

Regional currencies in their current design do not yet have the desired effect in the economic domain (increase of the local multiplier). Instead of changing the fundamentals of the monetary system, they 'regain' money after issuing. We could think of two possible solutions to intensify the impact of regional currencies.

1. Create a relationship between a business network (B2B) and the regional currency (C2B). This increases the ways in which a currency could be spent, and consequently also the multiplier. B2B could be used to finance the regional currency.
2. Regional fiat money: Disconnect the currency from legal tender.

The regional currency the Berkshares is working on this design. Loans in Berkshares are issued to entrepreneurs who are willing to set up a productive business. Consumers buy the products with Berkshares, so the loans could be repaid. In this design a new medium of exchange is created, covered by regional produced products.

Evaluation on economic currencies

Summary of our evaluation on economic currencies

Currencies with a focus on businesses in contrast to an approach aimed at consumer spendings have more effect in the economic sphere.

In general, businesses will consider complementary money to be inferior to legal tender, because of the limitation in spending options.

The possibility to convert a complementary currency back to legal tender hampers the velocity speed of a currency, as firms make use of the opportunity and write off the malus as marketing or credit costs.

Disconnecting the currency from legal tender could increase the currency velocity and with that its impact.

evaluation on economic currencies

Barter networks have proven to be a business instrument, working countercyclical on macroeconomic indicators. When expenditures in legal tender drop, payments in the barter network rise (inverse relationship).

Barter networks strengthen market positions of businesses with the focus on everyday regular recurring expenditure instead of luxury goods.

Cooperative organisational structures are preferred to a commercial structure, as decisions are made in the benefit of the network.

Peer-to-peer money systems (P2P)

IT

Peer-to-peer money systems are also called digital cash money. P2P systems are currencies without a central authority. This means that individuals can make payments to one another, without a central administrator. An algorithm is responsible for money creation. You could let your computer solve the algorithm, after which 1-unit is earned (mining). Computers are the wallets for these units.

Market 

___ Transactions are not registered, and consequently it is not clear for what purpose the currency is used.

___ Because of its payment anonymity, Bitcoin is sometimes associated with the criminal world.

___ Virtual money systems like Bitcoin has a fluctuating exchange rate in terms of legal tender.

Social 

___ New possibilities in transaction anonymity.

Bitcoin philosophy

Bitcoin is founded on the principle that when you hold money, it serves as proof that you have contributed something valuable to the world. It is a reward for effort or work. In the case of Bitcoin, it is the computational work and energy you provided to solve the algorithm. Bitcoin units are valuable because of their scarcity (there is only a limited number of Bitcoins in circulation). Therefore, the value of Bitcoins might fluctuate strongly. In times Bitcoins are in high demand, the value will rise. As no central authority is involved in issuing the units, P2P systems form an unconventional method in money creation.

Bitcoin[12] is one example of a peer-to-peer currency. Next to this, Ripple[13] is an important player in the P2P currency segment.

Governance 

___ P2P money systems are a significant for the future, as it renders banks unnecessary.

___ Power shift in money creation from bankers to individuals (IT).

___ Regulating the money system will be (even) more complicated.

SMS money systems

commercial firms

Market 

— Total amount of money in the formal economy will rise.

— Mainly long distance transactions from city to countryside.

— Will lead to a more equal distribution of monetary transactions between family members instead of large sums of money (Jack & Suri, 2011).

— Price of money transaction services (WesternUnion, MoneyGram) will drop. (Mbiti & Weil, 2011).

— Mainly used for transactions, not for saving.

Social 

— More people gain access to banking services

— Most users reside in urban areas and have a middle income (Jack & Suri, 2011).

— More transactions between family members.

Governance 

— Progoti[14] in Bangladesh offers the texting service for local banks. It runs on Cyclos software.

— The service is often managed by large telecom providers

digital money systems (electronic & virtual money)

An SMS (texting) payment service (or mobile money) is a payment transaction channel via texting. It doesn't create new money, but facilitates money flows. Units are transferred from one phone number to another.

Currently, there are 120 SMS payment services specifically designed for emerging markets. M-Pesa by Vodafone (active in Kenya and Tanzania) is the most well known example. It is expected that the amount of mobile transactions will rise from $240 billion to $670 billion in 2015 (Arkel, et al., 2012:5) Especially in developing countries, mobile payment services have proven to be very popular.

Juridical and fiscal context

For more information, please refer to our report published online: *'Juridical and fiscal context complementary money'* (Klamer.nl)

Different laws and juridical matters have to be taken into account when looking at complementary money:
1. Fiscal laws
2. Banking laws
3. Labour laws
4. Other laws and regulations: insurance for volunteers, liability, privacy, consumer protection, laws on money laundering.

the logic of governance in more depth: juridical and fiscal context

1 _____ Tax laws
"does tax need to be paid on received complementary currency units?"

Tax regulation is neutral, meaning that every form or unit that could be considered income is taxed in the same way.
__ The tax office makes a distinction between transaction in the informal sector, and regular economic exchanges.
__ Most important taxes include corporate tax, income tax and value added tax. The informal sector is excluded from all these tax laws.
__ When complementary money is used in regular economic exchanges, tax is paid in legal tender units.

__ Informal sector or economic domain?
Criteria for transactions in the economic domain:
1. Externally oriented (not for hobbies or family)
2. Projected benefits (subjective)
3. Benefits to be expected (objective)

_____ Tax fraud?

Digitalising money eases tax authority monitoring of money flows. Banks are required to grant the authorities access to all bank account details. Cyclos has been built using the same platform (Java) as many regular banks and can easily be linked to the system of tax authorities. When new systems are built for complementary currencies, supervision will become harder. Transparency is key. Naturally, currencies lacking a central authority like P2P are much harder to keep track of and manage.

Individuals

Trade of individuals in a complementary currency system like LETS of Time Bank are of an informal nature.

The Noppes deal: Article 5 ‘Fiscal treatment of income gained from participation in a local currency system: LETS units’ in ‘Income from other proceedings’.

— LETS participants have the responsibility themselves to judge whether earnings are considered part of economic trade or not.
— LETS organisations are required to inform the tax authorities on members earning more than 3000 units yearly.
— The complementary currency financial administration needs to be structured in such a way that account balances can be checked easily.
— Tax exemption below 3000 units has been introduced out of practical considerations and to prevent a ‘grey area

Entrepreneurs

Entrepreneurs pay tax on income and complementary currency, unless their income is unrelated to their proceedings (e.g. a lawyer selling cake in LETS)

— Barter units and regional money are taxed in the same way as conventional money (income and revenue). This is simplified in a way that 1 barter unit equals 1 unit in legal tender.
— In an agency time credit programme, units that are cashed-in are not taxed, as entrepreneurs need to hand them back to the issuing institution and are not able to spend them. This is therefore not perceived as income.
— The IRS has added a clause (IRS 1099-B) to facilitate tax declaration. In Europe, special clauses in taxation forms do not exist.

2 _____ Bank laws
“Is it completely legal to create your own money?”

When printing your ‘own’ money, you will need to comply with certain regulations. The Dutch Bank tries to prevent people from confusing this money with legal tender. Copying money, for instance, is illegal.

Only certified banks are allowed to create balances that facilitate general payments. The institutions are under constant supervision to ensure that this privilege is not taken advantage of.

Electronic money in The Netherlands needs to comply with the ‘Law on financial supervision’. Institutions will have to apply for a license to be allowed the status of Electronic Money Institution. Laws have been made to protect consumers and cover (amongst other things) cash-in possibilities, expiry date, and integrity of administrative bodies. European laws about electronic money can be found in the 2nd E-Money Directive (2EMD).

Exceptions: When only 1 product is considered or when it is about a limited geographic region (like a school), currencies may be exempted from applying for an EGI, as is the case with the BrixtonPound (exemption article 6, first section).

3 _____ Labour laws:
“does participating in a complementary money system affect unemployment benefit?”

— Laws about voluntary work rewards cover repeated work for one organisation only.
— Maximum voluntary work compensation is €1500,- yearly or €150,- on a monthly basis. For someone receiving an unemployment benefit a maximum of €764,- a year and €95,- monthly may be paid out.
— Services provided to support a complementary currency is considered as incidental voluntary work.
— Participation does not affect the rate of social benefits.

The technical and digital environment of complementary money

For a more thorough overview of different software providers, we refer you to our online report: *'software for complementary currency systems'* (Klamer.nl).

the logic of governance in more depth: technical and digital environment of complementary money

Complementary currencies that are (at least partially) designed in digital form need software. Every organisation has three possibilities:

1. Open source software
2. Commercial software
3. Develop own software

— There are several developers producing open source software. Cyclos[15], designed by STRO, is by far the most advanced piece of software. Cyclos is fully certified banking software, suitable for barter networks, C3, Time Banks, LETS and micro-financing organisations.

— CommunityForge[16] has designed a more easy to understand software system, working with the Drupal platform (in many regards comparable to Wordpress). For smaller initiatives, this software is preferred over Cyclos for its ease of use.

— STRO develops a shared instance in Cyclos 4.0, which enables smaller initiatives to use Cyclos.

Market

— Ease of use is key. The link with different payment methods increases the number of transactions.

— Well-functioning software is of great importance for larger payments in a barter network.

Social

— Not everyone has access to a computer. In many social programmes, human infrastructure is necessary.

— Bills and coins contribute towards a feeling of identification and satisfaction within a community.

— Different payment channels for the complementary currency in shops increase the use of it.

Governance

— Cyclos is a certified payment environment: this makes complementary currencies more reliable.

— Open source software reduces costs for the development of infrastructure.

— For small grassroots initiatives, Cyclos is too cumbersome to use. CommunityForge and a shared Cyclos 4.0 interface could be used instead.

— Risk: many commercial providers claim their software is the key to success: often it is not. Human factors play a large role too.

How to proceed?

In general

We have researched the world of community currencies. We have talked to many interesting people. We have met people and encountered organisations with bigger or smaller ideals. When we look at the complementary currencies altogether we conclude that many projects are initiated with much enthusiasm and great objectives, but that many face a difficult route from there. Often we observe that exactly those people who would have the most benefit of using a complementary currency, are oblivious to its existence, or only use the currency sporadically.

That doesn't mean we have not seen some successful currencies. Without doubt encouraging projects include Spice in Wales, the VNSNY in New York, the Community Banks in Brazil, Redes de Trueque in Argentina, Berkshares in the US, and the Swiss WIR. We can say that elements for success are:

1. **Necessity of a new medium of exchange**
2. **Feeling of ownership in the community**
3. **The right internal culture**
4. **A well-functioning organisation and impassioned staff**

summary and recommendations: how to proceed?

Success of previous projects can hardly serve as a sole motivation to work further with complementary currencies. The difficult start of so many projects shows the necessity of inexhaustible and persistent effort. However, old and current examples do form a good basis for working with complementary money. Experiences from the past could serve as lessons for future currencies. More knowledge on complementary currencies is available than 30 years ago when the first LETS started. Key is to learn form past experience and combine those practices to establish successful currencies. The key to success lies in the logics: sufficient supply and demand of goods in the market, a sense of ownership in the social logic, and the right people in the logic of governance.

Specific findings and recommendations

In order to evaluate complementary currencies in the right way, it is important to make a distinction between objectives. Some currencies are meant to complement existing monetary system. Others have the ambition to change that system altogether.

Complementary to current systems	Aim to change money systems
Barter networks/LETS	Regional currencies
Time Bank	C3
Mobile Money	P2P money systems
	Virtual money

summary and recommendations: how to proceed?

Schematic overview of results

Money design	Economy	Social	Comments
Regional currencies	No additional medium of exchange	Work well in contributing to forming an identity	Disconnecting from legal tender will increase economic impact
Barter networks	An extra medium of exchange for businesses	Function like business clubs	Strengthen small-medium sized companies when focusing on daily spending
LETS	Has no impact in economic domain	Only impact for very small group	Economic impact is larger when focusing on firms instead of individuals
Time Bank	Supply of services is limited, velocity speed can be low	Strengthening social capital	Focus is on community building instead of currency design
P2P	New way of creating money	Possible to make anonymous transactions	Change the role of central authorities in money creation
Mobile money	Increases amount of money in formal economy	More people access to banking services	Mainly popular in developing countries
Virtual money	Can keep money inside a certain system or region	-	Offers a perspective for conditioning of money flows. Could help fighting poverty

Factors that could affect the likeliness of a currency's success

— Spending possibilities: spending is in almost all cases harder than earning credits. The more spending options, the higher the value of the currency.

— Education and mediation: a complementary currency is quickly forgotten. The right mediation and education will remind customers of the benefits of using the currency.

— Organisation structure: the structure of the organisation will need to match its goals and affects support, resistance and ownership of users.

— Ownership: the community will need to feel responsible for using the currency. They will need to 'appropriate' the use of it.
Time: Implementing a complementary currency needs time, don't expect results right away but allow the currency some time to develop.

— The right team: the right people can activate others and contribute towards a healthy circulation velocity.

— Ambassadors: Ambassadors are key to extend the existing group of participants.

summary and recommendations: how to proceed?

Recommendations

This collection of success factors supports the following:

— Add spending options. Make budget available to find these, making sure they match end-user wishes.

— Invest in people; the right personnel can be decisive in a currency's success. When considering social currencies, invest in social workers. In barter networks, find the right brokers.

— Always keep the objectives in mind. Consumer spending has little impact on economic changes. When considering the economic domain focus on businesses.

— Build a currency to support existing demand and supply and monetary flows.

— Disconnect complementary currencies from legal tender.

What the US barter industry has taught us

— Always use the demands of people and firms as starting point. People use a currency for the goods and services they can acquire using that currency.

— People tend to quickly forget a complementary currency; continuous attention has proven crucial.

— People find it harder to spend complementary currency units than to earn them.

— The way a transaction is handled matters: the easier this happens, the sooner people will use the currency.

— Don’t let users earn the currency too easily, especially when there are not yet enough ways to spend the money. This will prove disappointing and users may leave the network.

— Keep currency designs clean and do not flood end-users with technical details and complicated regulation.

— A money system is never a goal on itself but is always a tool. Let the currency be subsidiary to people and firms.

summary and recommendations: how to proceed?

In conclusion

However successful and promising complementary money may be, introducing and maintaining the currency is a costly affair. Expertise, enthusiasm and a powerful organisation are prerequisites in making a currency successful. Next to this, users may need (especially at the start) some incentives before they join in, and when they do, to keep contributing. Currencies operating in the economic domain can build internal financing mechanisms by levying a fee, but will need an investor in the initial phase in order to grow. Both for large and small-scale initiatives with many volunteers, external financing is imperative.

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