MORE THAN MONEY

Literature review of the evidence base on Reciprocal Exchange Systems

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INTRODUCTION

INTRODUCTION

his literature review brings together the existing evidence of impact, outcomes and cost that exist across reciprocal exchange systems. Time banks, complementary currencies and peer-to-peer platforms for collaborative consumption are all examples of these reciprocal exchange systems, and to structure this review we have created a typology of different types of systems to organise the evidence.

The typology is designed with public services in mind, and is organised around objectives. The main distinction drawn is between two different kinds of reciprocal exchange:

- 1. **Social exchange:** designed primarily to motivate people's behaviour, to meet social objectives (information function dominant).
- **2. Economic exchange:** designed primarily to circulate and to meet economic objectives (store of value function dominant).

That gives a total of four types, which provide the structure for the rest of this report as shown in the table below.

The review has been structured to outline the evidence found within each typology group. Within these groupings the findings have been structured to describe:

- An overall analysis of the evidence and literature.
- Common outcomes identified by the literature.
- Where available, an outline of a few in-depth studies and evaluations.
- Bullet pointed evidence specific to individual case studies.
- Any direct evidence of cost benefits or savings.

The scope of this review was international, and the focus was to gather evidence on outcomes and cost benefits. The evidence has been largely gathered from academic articles and evaluations, including self-evaluations. A comprehensive review of the major complementary currency websites and online libraries has been conducted

	Social	Economic
Local	Time-based exchanges , e.g. Member-to-Member, Skill Swap, Rushey Green, Spice, Care Banks.	Local currencies , e.g. LETS, Brixton pound, Ithaca hours, Stamp Scrip, Community Way, local barter.
	Outcomes: co-production, building confidence, skills and social networks, supporting people for personal change or recovery, building community.	Outcomes: rebuilding local economies and employment, using local resources more effectively, valuing local waste, tackling poverty.
National or international	Reward points , e.g. Nectar, Nu-spaapas, Blue Dot, Young Scot, Wigan and Windsor, Time Dollar Youth Court.	Backed currencies , e.g. kWh money, Carbon points, Liberty Dollar, Terra, WIR, LLP money, goCarShare, C3.
	Outcomes: Nudging behaviour, reducing emissions, building loyalty, recognising effort.	Outcomes: re-valuing local renewables, revaluing agricultural produce, providing reliable currency, paying people with sustainable value, supporting SMEs.

PART 1: INTRODUCTION 4

and we have contacted a number of experts in complementary currencies to elicit grey literature, such as unpublished PhDs and internal evaluations. A full list of sources is attached in the bibliography.

This literature review was made possible with support from NESTA (the National Endowment of Sciences, Technology and the Arts) who generously funded the research and have worked alongside nef to write a report on the potential of reciprocal exchange systems for public services, due for publication in late 2011.

SOCIAL, LOCAL: TIME BANKS AND SERVICE CREDITS

Time banks and service credits

For example:

member-to-member, Skill Swap, Rushey Green, Spice, Care Banks, Fureai Kippu, Holy Cross Centre Trust

Local currencies

For example:

LETS, Brixton Pound, Ithaca Hours, Stamp Scrip, Community Way, local barter, Community Exchange, BerkShares

Reward points

For example:

Nectar, NuSpaapas, Young Scot, Wigan and Windsor, Washington Youth Court, Karrots

Backed currencies

For example:

kWh money, Carbon points, Liberty dollar, Terra, WIR, LLP money, C3, Farm notes

- his section draws out the relevant material from evaluations and reports on time banks and credits to document:
- Outcomes of time banks and service credit models.
- Cost benefits of time banks and service credit models.

These models of reciprocal exchange suffer from a real lack of evaluative material. There has not yet been any robust outcome or cost evaluations of a time banks, although a Social Return On Investment (SROI) analysis of a time bank in Camden has quantified some of the social outcomes achieved by the time banking activity. Much of the literature focuses on the process by which models work, with self evaluation a common methodology in those assessments which have been conducted.

Outcomes

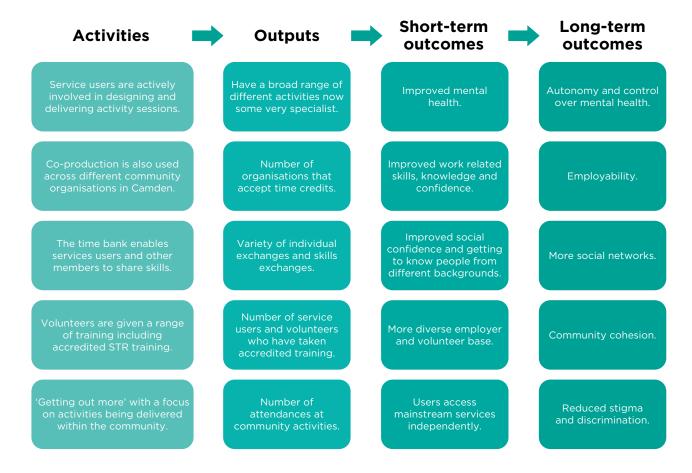
In this part of the paper, we have focussed on seven different evaluations or modelling exercises that show how models of local and social reciprocal exchange have generated certain outcomes or cost reductions.

We have identified below those outcomes which are most commonly associated with this typology.

These outcomes are noted throughout the literature and documented by time bank coordinators, participants and evaluators. They include:

- Improved social networks.¹
- Improved intergenerational relations.
- Improved psychological well-being.
- Increased access to public services.
- Improved employability.
- Increased social inclusion for typically marginalised groups.
- Improved confidence and self-esteem for individuals.
- Increased sense of belonging.
- Greater community cohesion.²
- Reduced stigma and discrimination.

Figure 1. Impact map of service users



The example in Figure 1, taken from a recent new economics foundation evaluation of the Holy Cross Centre Trust, outlines how these outcomes can be mapped.

Health and well-being

Much of the evidence on time banking outcomes is linked to improvements in health and well-being. Some of the larger time banks which are hosted by GP surgeries have had specific monitoring and evaluation exercises conducted. For example, an evaluation of the Rushey Green time bank showed that it:

- Improved social networks.
- Increased tolerance and understanding of conditions such as depression through 'mixing' people.
- Gave participants a sense of self-worth.
- Reduced the burden on traditional carers.
- Avoided lengthy and costly referrals by GPs.³

Similarly, a survey of 160 members of a hospitalaffiliated time bank in America showed:

- Improvements to physical and mental health.
- Significant impact on the health, well-being and sense of belonging of older and lowincome individuals, and those who live alone.⁴

Some evaluations of specific time banks have pinpointed particular benefits to public services, both within the health field and in other spheres. These include:

- At one American time bank, it was shown that more than 30 per cent of the activities offered and requested were web design and other IT skills. The focus of this time bank on skills development in areas which are highly valued in the job market suggests that a relatively large number of people are likely to return to employment when compared to other time banks.⁵
- A hospital group in Richmond, Virginia,

found that using a time bank to provide peer support for people with asthma reduced emergency admissions to hospital by 74 per cent and saved \$217,000 over two years.⁶

- An evaluation of a time bank in Salford found positive several positive outcomes attributed to time bank members including improved levels of health, well-being and confidence, and increased resilience. Time bank members were also more likely to be in formal employment.⁷
- The Fair Shares time bank scheme in Gloucestershire provides an element of aftercare following hospital discharge and is likely to reduce re-admissions or unnecessary visits to GPs.⁸

Spice credits

Spice, a time credit organisation, has conducted evaluations which show persuasive evidence for improving outcomes among participants. These include over 60 per cent of participants stating an improvement in confidence. Indirectly, Spice can improve health and well-being outcomes by channelling credits towards healthy activities – so rewards can be directly redeemed on healthy activities. There is also limited evidence that this model has been used to increase proenvironmental behaviours.

Spice credits have been used in this way in housing projects in Cardiff to increase use of health facilities, and specific projects have shown a reduction in crime, particularly anti-social behaviour.¹⁰ In one project, based in Bettws, the police have reported a 17 per cent reduction in crime since the introduction of a time bank to the Boys and Girls Club.¹¹

Visiting Nurse Service New York (VNSNY Community Connections Time Bank

An evaluation conducted by the University of Maryland's Center on Ageing showed that time banks were able to attract people who don't normally volunteer, keep old people healthier and cut drop-out of volunteers. People volunteers of research with older of the Visiting Nurse Service New York (VNSNY) Community Connections Time Bank showed that:

- 100 per cent of members reported that they have benefited from becoming members.
- Those with the lowest self-reported annual income (under \$9,800) and those who took the survey in Spanish reported the highest level of positive impact from membership.

- 48 per cent reported improvements in selfrated physical health.
- 72 per cent reported improvements in selfrated mental health.
- 67 per cent reported increased access to health and other community services.
- 90 per cent reported that the number of friends they have increased since joining.
- 79 per cent reported that membership gives them support they need to be able to stay in their homes and community as they get older.
- 85 per cent reported increase in sense of belonging to their community.
- 82 per cent reported that the quality of their life increased since joining.

These findings are consistent with the outcomes reported in other evaluations and broadly map to social, physical, mental health and well-being outcomes.

Accessing informal economies

A number of reports on time banking also point to its utility in engaging 'hard-to-reach' groups and using the time bank as a means of building up people's access to goods and services. This outcome is closely linked to public sector ambitions to reduce inequalities, and combat poverty and deprivation.

- A nef SROI evaluation of the Holy Cross Centre Trust time bank found that for the refugees and asylum seekers who used the time bank outcomes were largely linked to accessing the informal economy, and being able to improve a sense of community belonging.¹⁴
- Gill Seyfang's report *The Time of Our Lives* stressed the role of time banks in facilitating social networks and argued that they enabled people to improve their access to goods and services through an informal economy.¹⁵

Addressing social exclusion

Social inclusion and employability is highlighted as a recurrent outcome in the literature and evidence base for this typology. One study showed that time banks attract disproportionately high number of members of socially excluded groups: 72 per cent not in formal employment, 54 per cent receive income support, 58 per cent live in households with an income below £10,000, 42

per cent are retired and 13 per cent are disabled or have a long-term illness.

Much of the effectiveness of time banks in combating social exclusion has to do with how and where they are set-up. For example, if the time bank is located in a hospital or GP surgery they are more likely to connect with excluded groups.¹⁶

The cost benefits of time banking

Very little work has been done to capture the costs and economic benefits of reciprocal exchange systems which operate at the local, social level. Aside from hypothetical projections, a few disparate examples of cost savings, and an SROI analysis of the Holy Cross Centre Trust time bank, the most important contribution to this field came from the London School of Economics (LSE) PSSRU in 2010. A team at the LSE conducted a modelling exercise for time banks which analysed the cost/benefits for time banking.

The approach used is called decision modelling and seeks to show the economic impact of a time bank, compared to what would happen in the absence of one. The research was not based on primary data, and the assumptions were based on existing studies and on local experiences.

Martin Knapp and his colleagues argued that there is evidence to suggest long-term potential savings to both local and national government from using community-based schemes, such as time banks, in the delivery of public services.¹⁷ They identified a range of outcomes which included: "Positive physical and mental health impacts, improved employment prospects and decreased reliance on alternative forms of paid and unpaid support." which could be attributed to time bank support.¹⁸

The modelling exercise indicated that the cost for each time bank participant would average under £450 per year, but that the economic value to the state alone could be over £1,300 per person.¹⁹ Two points to note are:

- These estimates were conservative, so the gains could potentially be more.
- They don't isolate the impact of specific or individual models of time banks.
- They indicate value created for government (local and national) only: considerable additional value could be attributed to other stakeholders (individuals, and the wider

community, for example) through other methods, such as Social Return on Investment or Well-Being methodologies.

An SROI analysis of time-banking in mental health

In 2010-2011, **nef** completed an SROI study on a consortia of mental health services in Camden which have a time bank as part of their service, and have embedded co-production into the service. It showed that for every £1 invested in the service by the local authority, over £5.75 in social value is generated.²⁰ Cost savings associated with the mental health and employability outcomes of service users. The rest of the value is linked to outcomes relating to social networks, stigma and discrimination, and community cohesion. Isolating the value created to the state from the investment of Camden gives an ROI of over £3.40 for every £1 invested.²¹

The service relies on service users and time bank members investing their time and energy which have been valued at the London Living Wage to total £137,119.²²

It also found that:

"In our model, the focus on equalities outcomes generated savings for the commissioning body in several ways. On one level, encouraging and supporting people to play a greater part in the design of services increased the capacity of the service and meant they can stay open outside traditional service delivery hours. This saves the council money and allows more to be delivered with the same amount of funding. Importantly, however, it gives people the opportunity to contribute, to learn new skills, and to improve their confidence which has important positive impacts on their mental health. The partnership approach and method of delivering services in the community encourages service users to rely less on their service in the longer term, and also addresses some of the wider inequalities issues, such as stigma and discrimination, that can perpetuate poor mental health and lack of social cohesion."

As the SROI analysis shows, the value of the time brought into the service through time banking can be quantified, and one US evaluation has gone on to associate direct financial savings with this time. This US time bank started a service involving time bankers who earned credits taking part in a 'telephone reassurance' program to children with asthma, who collect information on

whether children had had attacks and were taking their medication. They found that it had saved statutory services over \$100,000 in unnecessary visits by home nurses alone.²³

Member Organized Resource Exchange (MORE)

MORE is a program running in Grace Hill, St Louis, designed to engage local community in helping neighbours, and running in over ten neighbourhoods within St Louis. Exchanges between and among neighbours are rewarded with time dollars, which can be exchanged for services with other residents, exchanged at Grace Hill Neighbourhood Health Centres and used for commercial goods – including furniture, at MORE stores. An estimated 30,000 people took part in the MORE programme in one year across a variety of activities including shopping, visiting, home repairs, support groups and self-help courses.²⁴

Since MORE was fully computerised in 1991, service activity by residents has generated over 670,000 time dollars which, calculated at minimum wage, would have an equivalent monetary value of \$3.5 million.²⁵ Outcomes of MORE's activity are documented to include; wellbeing, confidence, skills and employability.²⁶

SOCIAL, NATIONAL: REWARD POINTS

Time banks and service credits

For example:

member-to-member, Skill Swap, Rushey Green, Spice, Care Banks, Fureai Kippu, Holy Cross Centre Trust

Local currencies

For example:

LETS, Brixton Pound, Ithaca Hours, Stamp Scrip, Community Way, local barter, Community Exchange, BerkShares

Reward points

For example:

Nectar, NuSpaapas, Young Scot, Wigan and Windsor, Washington Youth Court, Karrots

Backed currencies

For example:

kWh money, Carbon points, Liberty dollar, Terra, WIR, LLP money, C3, Farm notes

his section draws out the relevant material from evaluations and reports on reciprocal exchange schemes that use loyalty points or rewards, and which have benefits to the public sector.

Because the outcomes associated to this typology are often unique to the type of incentive being encouraged, it is difficult to map common outcomes across different models. The examples here cover criminal justice, education, poverty, environmental change and youth engagement. Instead of trying to draw a link with common outcomes, we have documented examples from the literature that show the impact of reciprocal exchange systems in achieving specific changes in outcomes, and/or reductions in cost.

Some broad connections and hypotheses can be drawn from the literature, especially around value for money, given that most reward schemes are supplied through excess capacity or public cost-savings. As well as more quantifiable public outcomes from a social or environmental perspective, many schemes also deliver psychological and social well-being outcomes.

This typology has more fixed incentive and reward mechanisms than the local/social models – for example, trading recycling with tax offset

schemes, or increasing child immunisations with direct payment incentives to parents. Programmes and models in this typology often have much more clearly defined behavioural goals, such as increasing attendance at school, or incentivising people to recycle their own waste, in contrast to the broader social outcomes achieved through broader time credit schemes. While a reward structure implies a rationalist incentive, many smaller schemes still rely on altruism.

The Washington Time Dollar Youth Court (lower recidivism)

The time dollar youth court engages young people in the criminal justice system, rewarding them with credits in return for their participation in peer juries.²⁷ In 2009 alone, the court was referred over 1,000 young people, many of whom were referred on to complete over 2,700 hours of community service, and to services for counselling, substance abuse, mentoring and tutoring.²⁸ According to Burns, between a quarter and a half of all first-time young defendants in Washington were taken out of the court system, with obvious cost-savings.²⁹

A survey run by the University of Columbia found that almost 100 per cent of parents reported that their child had stayed out of trouble following a referral.³⁰ Since starting to track recidivism rates

in 2003, the youth court has found that one year after completing the programme the recidivism rate was 9 per cent, compared to over 25 per cent as the state average.³¹

Cost benefits could be calculated by measuring the value of the additional capacity provided by time court attendees, and through calculating the direct savings to the state for the fall in offending.

Family support programmes in Latin America (poverty and inequality reduction)

Conditional cash transfers (CCT) have proved an extremely effective way of enhancing social outcomes across Latin America's poorest households. The programmes are broadly aimed at achieving outcomes including poverty reduction, inequality reduction, the building of human capital and to promote social inclusion.

Thorough evaluations have shown that Brazil's Bolsa Familia has had multiple benefits (described in more detail below), but in particular have been effective in reducing poverty and income inequality.³² From 1995 to 2004, the Gini index – which measures income inequality, fell by 4.7 per cent with the Bolsa Familia being responsible for 21 per cent of this fall.³³ In Mexico, Oportunidades – another CCT – had a similar impact, being responsible for 21 per cent of the 5 per cent decrease in the Mexican Gini Index between 1996 and 2004.

The Bolsa Familia is the world's largest conditional cash transfer programme, enforcing conditions such as children's attendance at school and use of health services in return for cash incentives.

An impact evaluation conducted in 2005 conducted a baseline analysis of data across education, work and household expenditure.³⁴ This, and other evaluations have included control and comparison groups, and found that as a result of the programme:³⁵

- Children's absenteeism at school has been reduced from 12 per cent to 8.7 per cent.
- The number of people with 11 years education or more increased from 19 per cent to 26 per cent.
- Marginal (but visible) increases in the health indicators including take up of medical appointments, and the number of doctors and dentists.
- Life expectancy has risen by three years.

• Child labour rate has decreased from 16.6 to 11.1 per cent.³⁶

The IPC Evaluation also showed broader changes in outcomes, including a direct positive causal link with educational attendance – but not in achievement.³⁷ There was no impact on child immunisations despite it being directly linked as a condition, though similar programmes in Latin America did see a positive increase, and the evaluation suggests there may have been supplyside barriers not considered within the evaluation framework.³⁸

One study pulled together the following impact evaluations from Brazil's Bolsa Familia and compared them with similar CCTs across Latin America.³⁹

- Education: children in the programme were less likely to be absent (3.6 per cent), to drop out (1.6 per cent) and more likely to advance to the next year (4 per cent) than those that weren't enrolled. In Mexico, advancement increased but overall grades dropped, perhaps because more under-achieving children attended school.
- Health care immunisation and checkups: Bolsa Familia had no impact on child immunisation despite direct conditionalities around immunisation being attached to the payments. However, in Colombia, the programme improved check-ups and immunisation, while in Mexico and Chile rural coverage improved. The lack of improvement in Brazil may be due to supply-side impediments, in particular a lack of health services being available.
- **Nutrition:** The programme had a significant impact on reducing the stunting of babies between 6-11 months. However, it failed to impact children between 12-36 months, the critical age in physiological development. Again, this could be down to lack of services to monitor children, as *Oportunidades* in Mexico did have a significant impact over that age.
- Labour force: Participation of adults receiving the Bolsa Familia was 2.6 per cent higher than those not part of the programme, despite the criticism that it de-incentivises work. However, there was a gender difference, as the percentage was almost double for women (4.3 per cent). Results of CCTS on labour participation vary across countries but overall do not show a negative impact: Mexico and

Colombia have shown no change in labour force participation, while Chile showed a positive impact in rural areas.

Curitiba recycling credits (positive environmental behaviour)

Brazil has developed another national reciprocal exchange in Curitiba, where a reward scheme has catalysed recycling, provided livelihoods and also maintained a clean living environment for the city's poorest inhabitants. Within the space of a year, 11,000 tonnes of refuse was exchanged for one million bus tickets – which can also be exchanged for groceries or school books – and 1,200 tonnes of food.⁴⁰ The model has seen the average income in Curitiba rise to three times that of the Brazilian average.⁴¹

It has also been successful in incentivising previously excluded individuals to participate in the local economy for the first time, rather than just recipients of aid, thereby building their self-confidence and breaking down social barriers. ⁴² The goods used for exchange were often supplied through spare capacity, and the local authority is able to directly save on waste and sanitation costs.

Cost benefits and savings

What evidence there is points to high levels of public benefit and behaviour change with costs borne primarily from direct savings (reduced landfill, less need for court or sanitation services), surplus capacity, or budgets already earmarked for a particular welfare/environment purposes. Given the right support, schemes can be self-financing or even money-saving. Specific examples of this include;

- The Government's Connexions Card for 15-18 year olds, which relies on donations of surplus sports equipment, tickets or other possible rewards.
- Brent and Lambeth have given cash rewards for recycling (£10 for recycling half of the time over six months), achieving a 34 per cent and 27 per cent reduction in weight respectively.
- Peckham Pulse allows young HourBank members into the sports centre in return for helping out the community.
- St Louis and Brixton provide training which would normally be free for those who earn time credits, but have a higher up-take rate due to a sense that it has been earned.

PART 3:

LOCAL, ECONOMIC: LOCAL ECONOMIC EXCHANGE

Time banks and service credits

For example:

member-to-member, Skill Swap, Rushey Green, Spice, Care Banks, Fureai Kippu, Holy Cross Centre Trust

Local currencies

For example:

LETS, Brixton Pound, Ithaca Hours, Stamp Scrip, Community Way, local barter, Community Exchange, BerkShares

Reward points

For example:

Nectar, NuSpaapas, Young Scot, Wigan and Windsor, Washington Youth Court, Karrots

Backed currencies

For example:

kWh money, Carbon points, Liberty dollar, Terra, WIR, LLP money, C3, Farm notes

his section draws out the relevant material from evaluations and reports on reciprocal exchange schemes that involve local currencies. A broad review of the literature shows some evidence for improved outcomes and cost benefits, particularly with LETs schemes, but again this model has suffered from a paucity of comprehensive evaluation that would provide more robust and detailed indicators on outcomes and costs.

Outcomes

Local currencies appear to gain widespread acceptance and provide positive economic outcomes when they are responding to a failure within the existing monetary system. But there is currently little evidence to show they provide the claimed economic benefits, either because rigorous analysis has not yet been completed, or because what does exist has not confirmed the benefits. The literature also shows that local currencies have a social as well as economic effect, although this is often based on qualitative and anecdotal evidence.

Rebuilding economies after a crisis

Much of the literature points to the role of local currencies in re-building economic activity after

a crisis. For example, post-depression Austria experienced great success with its alternative Wörgl 'Labour Certificates'. The depreciating currency was issued by the local parish, and therefore accepted also. A study that examined all contemporary and recent analysis found.⁴³

- Tax arrears that had risen rapidly between 1926 and 1931 were substantially paid.
- Local tax revenues rose by more than 61 per cent, even being paid in advance due to demurrage (negative interest).
- Local business climate and general prosperity also improved
- The local parish also profited from administration fees and interest earned from the banked currency.

The Argentine case

The literature shows that Argentina experienced similar success with complementary currencies following its own economic crash and devaluation of the peso. The alternative 'crédito', traded by over 2.5 million participants in 4,700 markets at its peak, created informal employment and alleviated poverty as well as reviving local economies. 44 Organisers claim *Red de Trueque*

(bartering network) members' consumption increased by over \$600 a month, more than double the minimum wage, while members traditionally had lower incomes, lower levels of education and more than double the normal unemployment rate.⁴⁵

The Red de Trueque (RT) accounted for between 11 per cent and 25 per cent of a participant's household income and provided the equivalent of minimum wage employment, taking a great burden away from the state. Colacelli and Blackburn also find that the RT added 0.6 per cent to Argentina's GDP.⁴⁶

However, Powell notes that while it did provide income, it had limited impacts as a bridge to formal employment. Work conducted with the RT considered strictly informal.⁴⁷ However, as with LETS in the UK (see below), the RT provided a testing-bed for small businesses and microenterprises, seeing a high survival rate of those started within it.⁴⁸ The RT also led to positive environmental outcomes as most goods sold through the markets were recycled, recovered or re-used.⁴⁹

Ithaca hours

Ithaca hours in New York, probably the most successful local currency outside of a crisis, achieved 900 participants and a circulation of \$100,000 in 2005.⁵⁰ An economic analysis of the hours found local paper currencies do not offer large economic benefits during periods of economic and financial stability, with small evidence of a multiplier effect and no higher rates of growth than cities not using them.⁵¹

A survey of Ithaca hours users found mixed economic outcomes but definite social ones through the creation of social and cultural capital.⁵² While almost two thirds of users did not see Ithaca Hours providing access to goods they would not otherwise have access to, almost three quarters saw the scheme bringing them new customers, and were involved primarily for business reasons. Forty-three per cent per cent agreed or strongly agreed that hours encouraged them to develop new skills, while 84 per cent agreed or strongly agreed that hours led to an improvement in their quality of life.⁵³

However, Ithaca hours suffers from a similar problem to many LETS schemes in that membership is very limited, with most users being highly educated, on a modest income and with a preference for green politics.⁵⁴ The ability to expand and therefore be a real tool for economic regeneration is limited,⁵⁵ contrasting against

créditos in Argentina and *Palmas* Brazil (see below) where widespread buy-in was linked to income benefits rather than value-systems.

Fomento Fortaleza

Despite the multiplier effect not being apparent in Ithaca, an evaluation of the Fomento Fortaleza project in Brazil found the use of local currency Palmas resulted in higher economic benefits to the local economy than using the national currency. The currency was also backed by a state-supported bank and public works schemes were undertaken using the local currency as partial payment.

Future analysis showed the income effect of using *Palmas* was almost 15 per cent higher than the national currency, the *Reais*. ⁵⁶ The project also succeeded in achieving other economic and community-based outcomes, including:

- An increase in links between local businesses.
- Increased turnover for local businesses through an increase in local purchasing power (previously, 46 per cent of all money was spent outside the community; now 100 per cent of those interviewed said they had changed their consumption patterns towards local products).
- More loans granted by Banco Palmas in local currency – although there was a greater willingness from enterprises to accept loans if a percentage was paid in national currency or exchange rates were lower.
- Consumers saw those using the currency as socially responsible and caring for the community, and therefore had a greater bond with those businesses.
- Increased local production capacity due to increased demand.
- Increased visibility and credibility of the Residents Association (Associacao de Moradores do Conjunto Palmeira) and of Banco Palmas.

LETS (Local Economic Trading Schemes)

Theoretically, LETS have the potential to encourage economic development, environmental improvement and community development. However, evaluations of LETS in the UK have shown limited economic outcomes but very large social and community benefits. They are also mainly more than a decade old. A case study by Gill Seyfang finds low levels of trading

in the UK, with participants seeing LETS as a marginal economic activity.⁵⁷ The creation of new opportunity was limited, as most purchases were affordable or 'luxury', rather than necessity, which was reinforced by the absence of staple goods within the system.

There are a few examples, such as in Manchester where members reported buying clothes and food through the scheme, but they are limited.⁵⁸ However, Seyfang highlights that most members see membership as a social rather than economic activity, building social capital. One study showed LETS as indirectly improving employability through skills and self-confidence building, showing that the dichotomy between economic and social outcomes is often a false one.⁵⁹

LETS in the UK has provided a test-bed for new businesses, with 10.7 per cent of co-ordinators saying it helped them develop their own business idea. ⁶⁰ Forty per cent were also given access to interest-free credit through LETs. However, while it might provide new opportunities to socially excluded groups (62 per cent of those registered were unemployed), the stance of the state can act as a barrier, as earnings through LETS jeopardise benefits payments. ⁶¹

In the Netherlands and Flanders, the situation is similar, with schemes attracting often unemployed but highly educated and politically alternative individuals. Outcomes are also tempered by limited participation, with those in Flanders spending less than five exchanges a year while in the Netherlands, participants undertook less than five exchanges a year.

Local currencies have been particular prevalent in Asia, yet there remains little evaluative literature and scant impact assessment.⁶⁵ The reason for this in Japan is, according to Hirota, because the different schools of complementary currency systems (CCS) are competing rather than collaborating and therefore unwilling to share findings, as well as fearing their exploitation by private think tanks.⁶⁶ Hirota also claims the lack of economic evaluation is linked to the purpose of local economic exchange systems as social rather than economic, refusing to frame them as a driver of economic growth but rather a community building tool.⁶⁷

Supporting this assertion, a mapping exercise of Japan's CCS by Izumi showed that 35 out of the 44 who responded saw the systems primarily as a tool to rebuild the community.⁶⁸ But there is a contradiction here; the systems attract people because they claim to have an economic role. If

this disappeared the social side might disappear too, just as making friends is easier via some other activity, rather than directly.

Regiogeld and transition money

In Regiogeld programmes (in Germany, Switzerland, Austria and the Netherlands) and Transition currencies (in UK and the Netherlands), new local currencies are introduced. The aim of these programmes is to increase the velocity of money in a defined region and with defined businesses (usually SMEs) so as to increase the size of the economy in that region, and thus create jobs, stimulate innovation and increase local and regional resilience. Citizens usually buy these currencies in to existence at an exchange rate, which is typically one-to-one at the participating retailers. Retailers can exchange the notes back into legal tender, sometimes with an exchange fee. The fee can be used to donate to charity or cover the operational costs of the programme.

Business case

Evaluation of the Chiemgauer programme in Germany demonstrated that the velocity of regional money is five times higher than legal tender, equivalent to an increase in spending of five times with resultant positive effects on demand and employment.⁶⁹ **nef** (the new economics foundation) conducted a study in 2002 which suggested only around 10-12 pence of every pound spent in supermarket chains remained within the local economy, whilst a more recent study of the West Michigan Economy in the USA concluded that if residents of the area were to redirect 10 per cent of their total spending from chains to locally owned businesses, the result would be \$140 million in new economic activity for the region, including 1,600 new jobs and \$53 million in additional payroll.⁷⁰

One analysis of the Brixton pound shows some local economic benefits along the same lines, based on money flows analysis using LM3. The research found that, for every one Brixton pound spent in the following shop, it contributed an extra:⁷¹

- 35p to the local economy in Brixton Cycles.
- 84p in Brixton Cornercopia.
- £1.09 in Viva Café.

PART 4:

ECONOMIC, NATIONAL: BACKED CURRENCIES

Time banks and service credits

For example:

member-to-member, Skill Swap, Rushey Green, Spice, Care Banks, Fureai Kippu, Holy Cross Centre Trust

Local currencies

For example:

LETS, Brixton Pound, Ithaca Hours, Stamp Scrip, Community Way, local barter, Community Exchange, BerkShares

Reward points

For example:

Nectar, NuSpaapas, Young Scot, Wigan and Windsor, Washington Youth Court, Karrots

Backed currencies

For example:

kWh money, Carbon points, Liberty dollar, Terra, WIR, LLP money, C3. Farm notes

here is very limited evidence on the cost benefits and outcomes achieved of backed currencies. What research there is exists mainly in the form of feasibility studies. The development in C3 in Uruguay on a huge scale will undoubtedly provide some research in the next few years. It seems strange that this research does not exist already, but STRO - the Dutch consultancy responsible for developing C3 - assures us that it has not yet been done.

The same is true of WIR. It seems strange that such a well-established system has not been researched properly, but we have yet to track down evidence of this. Economists are rarely keen to evaluate anything that looks like barter, and social researchers may not be attracted to something so well-established. That said, James Stodder's study of WIR in practice suggests that it is highly counter-cyclical, supporting small business by providing them with better bank balances during recessions.⁷²

Either way, we need to know more about the effects of C3 and WIR, in particular:

- Do they help small business?
- Do they improve the velocity of money in disadvantaged areas?

Can they improve local economies?

If the answers to these turn out to be yes, then C3 and WIR are both prime candidates to be piloted in the UK.

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