

# MORE THAN MONEY

Platforms for exchange and  
reciprocity in public services

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# FOREWORD

It's increasingly clear that we live in collaborative times. Many of the most interesting innovations of recent years have at their heart ideas of sharing, bartering, lending, trading, renting, gifting, exchanging or swapping. These are age-old concepts being reinvented through network technologies and a cultural shift driven by the more civic minded millennial generation.

NESTA's work over the past couple of years has sought to understand how this movement towards collaboration – what Rachel Botsman has called Collaborative Consumption – can be applied to meet rising social needs as well as disrupting commercial markets. Our work with a growing body of social innovators from across the UK suggests that there is huge potential for new platforms for reciprocal exchange to harness idling capacity, reduce waste, build social capital and transform the relationship we all have with public services.

While there is an enormous explosion of interest and expectation, in many ways this isn't a new field of activity. We commissioned this report in an attempt to learn the lessons from the past and to provide a framework for understanding the many different approaches to complementary currencies and other platforms for reciprocal exchange. Who better to articulate this than David Boyle and nef (the new economics foundation), who have been central to the development of theory and practice in this field in the UK and across the world. In parallel to this report we are also publishing a literature review, which presents the existing evidence of impact across different types of reciprocal exchange systems in greater depth.

We hope that these publications are a timely and useful contribution to what promises to be an important trend in innovation. As ever, we would welcome your comments.

**Philip Colligan, NESTA**

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## PART 1:

# RECIPROCAL EXCHANGE SYSTEMS: A TYPOLOGY

**T**here are now a great variety of exchange systems that exist alongside the traditional cash economy, ranging from babysitting clubs to Nectar points. Some of them revolve around complementary currencies, like time dollars or the new Transition currencies like the Brixton pound. Others are built on systems of mutuality that may be supplemented by the use of cash or complementary currencies, like peer lending schemes or the Southwark Circle.

A range of typologies could be drawn up to encompass this growing field. This one is organised around objectives, because it is built on the assumption that exchange systems exist to meet particular needs which can be categorised together. It is very much designed with public services in mind and aims to clarify the roles that different exchange systems could play to support the delivery of public outcomes.

The main distinction is between two different kinds of reciprocal exchange:

1. **Social exchange:** designed primarily to motivate people's behaviour, to meet social objectives.
2. **Economic exchange:** designed primarily to circulate and to meet economic objectives.

Of course, there are exchange systems in each category which occasionally behave like the others – time credits which circulate among the users, or local currencies which are actually just paid out by the local council to motivate people to behave. But their central purpose is what counts here, and – with some exceptions – the central purpose tends to determine the basic design.

In exchange systems where the **social exchange** function is predominant, credits can be issued and simply deleted when they are spent. This is not possible in the same way with economic exchange where, to retain their credibility, credits have to add up at the end. The challenge for

social exchange systems is persuading people to appreciate credits which might be regarded as basically valueless. The fact that people spend the credits is what gives them value. Examples of these systems include loyalty points, issued by the organisation and then deleted when spent, and time banks, where users' accounts may be in credit or debt without compromising the sustainability of the system.

In exchange systems where the **economic exchange** function is predominant, credits need to circulate like money does and have a continuing existence once they are issued. The challenge for these systems is primarily persuading people to trust the credits, so it matters very much what backs them, whether the books balance and that the credits continue to circulate. Examples of these systems include local currencies, which are backed by traditional currencies or local produce, involve a whole range of different users and need to circulate and add up at the end.

Both of these categories can be divided into *local projects*, which rely partly on personal relationships to achieve their objectives, and broader *national* or international operations which don't – and which therefore need to be able to motivate users and to generate the kind of belief and loyalty that will create meaningful exchange volumes.

That gives a total of four types, which provide the structure for the rest of this report:

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

The next four sections cover the different kinds of system under each of these categories in turn.

## PART 2: TIME BANKS AND SERVICE CREDITS

**T**ime banks, service credits and similar systems provide a means by which people can make their time and ability to care more available in the community, and also a way to measure and reward what they do – normally on the very simple basis of an hour for an hour.

Outcomes of the exchange systems in this category include building confidence, skills and social networks, supporting people for personal change or recovery, and building community. This is also a vital infrastructure for making co-production possible and therefore has a strong potential impact on the delivery of public services.

Two features usually define this category, and distinguish them from other exchange systems:

- The critical importance of altruism as a motivating factor – the credits are intended as recognition of effort rather than full and fair payment.
- The importance of having somebody real at the heart of the system, encouraging, providing human care and building loyalty.

### History

In their current form, time banks – or service credits as they were originally called – date back to an idea by the civil rights lawyer Edgar Cahn, drawing on his critique of President Johnson's Great Society programme, which he was closely involved with in the 1960s.<sup>1</sup>

The basic reciprocal exchange system along these lines had been around for some time, most commonly used in babysitting circles. There was also an attempt by Age Concern in the 1970s to launch a scheme called Link. What made Cahn's time dollars so effective was partly his fully developed ideology, which meant they were more than just technocratic swap shops, but also the emergence of ubiquitous IT systems. Before that,

systems were faced with a choice either of highly complex record keeping or difficult economic questions about issuing tokens – too much liquidity (inflation) or too few tokens (deflation). Software made the management far simpler.

Of the original six time-based schemes in the health sector, launched in 1987 in the US, one (Member-to-Member) survives. The first time bank in the UK opened in 1998; the first one embedded in a public service (Rushey Green) in 1999. Both still continue, though at least as many time banks have closed as those which still carry on today (about 140). This type of exchange system is already being used widely in public services on both sides of the Atlantic. Many of these are time banks which issue exchangeable points to recognise people's efforts in the local community, and which they can use when they need help themselves.

*Legal position:* The UK government agreed in 2000 to ignore time credits for tax and benefits (except for those who were on Incapacity Benefit, and in the case of goods). It is a similar situation in the US.

### Examples

These range from simple donation websites, like Freecycle, through to the complexity of a time bank, like MORE in St Louis, which links health, education and other services together with a network of people who might otherwise be disconnected volunteers. It was fashionable to divide time banks up into those which encouraged individual connection and those which were more interested in linking agencies with those who use their services. But increasingly these various different kinds of time banks have learned from each other and it is harder to distinguish them. This typology also includes the variety of online systems that play a similar role, like Skill Swap or Friendly Favours, which are included in this category because altruism is their main driver.

Examples include:

### **Time banks in health, housing and education**

Rushey Green Time Bank, in a GP surgery in Catford, was the first time bank in the UK to be based in a healthcare setting, and it has established a reputation for pioneering work in this field.<sup>2</sup> It has been evaluated on various occasions and has a proven record of improving mental and physical well-being. In 2009, the Paxton Green surgery in Dulwich followed suit, which means that patients at the practice can now get involved in a range of activities including befriending, visiting, lifts, art, creative writing, meditation, walking and much more besides.<sup>3</sup> There are plans for time banks across Lambeth in South London to link up and organise healthy walks, groups to give up smoking and other schemes. This will allow members to earn credits, for example for helping out or going to smoking clinics, and spend them on a range of benefits and activities offered across the time bank network.

A similar scheme, the Lehigh Community Exchange in Allentown, Pennsylvania, is funded by the local hospital. It is used to offer 'relationship-based' care at the Caring Place surgery and it makes therapies available for credits, mainly for people in the area without health insurance.<sup>4</sup> Members also work alongside nurses dealing with palliative care, providing a friendly face or a shoulder to cry on or a bit of shopping.

Holy Cross Centre Trust uses time banking to deliver an innovative mental health day service on behalf of Camden Council. Both members and staff are involved in running activities through the time bank with the support of volunteers, who receive a Guilds mental health certificate in exchange for a number of time banked hours of service in the Centre.

MORE (Member Organised Resource Exchange) is probably now the biggest time bank in the world, run by the settlement house Grace Hill across St Louis and St Charles, Minnesota.<sup>5</sup> MORE now underpins community involvement in 11 neighbourhood centres and four health centres, and has over 12,000 participants. Time credits can be used to buy services at health centres or buy everyday household items and larger purchases, such as major appliances and furniture at MORE stores. MORE also runs a Neighbourhood College where members can attend certificate courses on subjects such as parenting education and financial literacy. Touchscreen computers around town can put local people in touch with services and with each other when they need help and support. Time dollars are used to link the

services, motivate the members and involve the participant. The basic funding comes from health centres. Being able to pay for an initial check-up in time credits means that more people are being checked. The scheme also increases the number of people affiliating to the health centres – and consequently the centres' Medicaid capitation fees.

### **Agency outreach time banks**

Member-to-Member (M2M) was funded by the Brooklyn-based insurance company (strictly speaking, a Social Health Maintenance Organisation) Elderplan.<sup>6</sup> It was one of three original 'Social' HMOs, given a special responsibility to look after the health of their clients in experimentally broad terms. Based in Brooklyn, it serves as a health insurance company to the largely Jewish neighbourhood, though the company has since expanded into other New York City boroughs, and used the time bank in their marketing.

Aside from basic core services for each other, the programme offers shopping, escorts, friendly visiting, bill-paying, hospital visiting, home repairs, walking clubs, support groups, self-help courses and others, all funded by time dollars earned through the scheme. In 2000, Member-to-Member launched a special programme for diabetics, which includes a major self-help component managed through the same time bank.

Originally, the scheme was used by the participants as a way of extending the long-term care insurance they were getting through Elderplan, earning credits so that they could receive visits and lifts if they needed them – and home repairs, which have been the most popular service offered. Participants remained healthy for longer than average, which meant Elderplan was able to offer 25 per cent discounts on premiums in return for time dollars – though Elderplan is now zero-premium.

To replace this perk, Member-to-Member launched CreditShop in 1998, which allows participants to use their time earnings to buy goods and services outside the system. These include health care products like blood pressure monitors, cinema and theatre tickets, transport vouchers, supermarket and luncheon vouchers – all of which are provided to the scheme at a discount by local business. Organisers also negotiated fixed price lunches throughout the borough of Brooklyn.

M2M has been followed by a similar service run across the city by the Visiting Nurse Service of New York (VNSNY). They recognised that when home healthcare ends, a patient may have other needs that can be met by people in the community. VNSNY staff and other professionals in the community can refer people to the time bank where they can get a variety of services, such as finding someone to accompany them to the doctor. The original time bank project was so successful in attracting a diverse range of inter-generational members, speaking 13 languages between them, that VNSNY has launched two more schemes in different areas of New York.

### Person-to-agency time banks

This is the model of time banking pioneered by the social enterprise Spice.<sup>7</sup> This began in communities including Blaengarw, which is a small and isolated former mining village near Bridgend in South Wales. The Blaengarw Workmen's Hall was built in 1894 and was at the heart of the mining community in the valley and the centre of educational and social activity. But, since the closure of the last six mines in 1984, the valley has seen a decline in the number of residents, a large increase in unemployment and a slow disappearance of the strong traditions of mutualism and collective community identity centred on the hall.

The Time Network, based in the hall since 2005, lets people earn time credits by giving their time to help with running any of the community groups in the area. They use these credits to access social events and activities at the hall or in the other venues in the community (social club or rugby club). The hall puts on a wide range of events such as bingo, salsa classes, pantomimes, plays, choirs, comedy nights, film clubs or a New Year's Eve party.

Rather than tracking hours with a ledger book, the time centre uses paper currency in denominations of one or two time credits. To attend the events in Blaengarw, people can either pay in cash or with time credits. The time credits are strictly hour-to-hour; whether it is bingo or opera, a three-hour event is always three time credits.

Similar projects have spread around South Wales in particular, and have been taken up by housing associations like Taff Housing.<sup>8</sup> Tenants earn credits by volunteering their time to help deliver the services of the housing association, for going to focus groups, tenant and steering group meetings, being on interview panels for Taff staff, writing articles for the Taff newsletter, helping to arrange events and trips for tenants,

doing jobs that benefit the hostel collectively, like communal shopping or watering flowers, creating a new clubs or community events linked with Taff or acting as a tenant board member. Rewards include entry to local sports centres. You don't have to be a tenant to earn.

### Agency-to-agency time banks

The first of these was launched by the Holy Cross Centre Trust, and based upon their work with the Kings Cross Time Bank. Camden Shares is a time bank marketplace, encouraging and enabling members to share resources. The sharing of resources is a soft way for organisations that would not traditionally interact to get to know each other. It encourages an approach to work that is collaborative. Through an initial time banking relationship, a number of organisations have gone on to submit joint funding applications.

Members of Camden Shares include organisations like University College London, which offers access to their space in return for using time credits to incentivise participation in their courses, and theatre companies, which use space available through the network to rehearse and offer in exchange free tickets to their performances or workshops. Other resources traded by members included spare places on training courses, use of minibuses, tickets from local cinemas, skills from local businesses and shared activities like yoga classes.

### National insurance networks

The story of Fureai Kippu (Ticket for a Caring Relationship) in Japan dates back to the pioneer Teruko Mizushima, who wrote an article setting out the basic idea in 1950 called 'Labour Bank'.<sup>9</sup> She started her own Volunteer Labour Bank in Osaka as part of the women's movement that is still on-going today. Fureai Kippu built on this as a way of tackling the shortage of resources to support a rapidly ageing population.

Its development coincided with the upsurge in volunteering in Japan after the Kobe earthquake in 1995. The 'tickets' are worth the price of a home-cooked meal and are widely accepted in exchange for similar support all over the country. They can also be combined with cash in some circumstances. A national clearing house for credits from different parts of the country has actually never materialised. Unlike most of the UK time banks, it also deviates from the principle that all time is equal; personal care is usually priced higher than other forms of support. Fureai Kippu is also one of a number of related systems across the country, linked into a Health Care Currency System now on one nationwide computer system

covering around 300 time banks. Some of these use plastic coins, but the majority use electronic credits.

As most reciprocal exchange systems aiming to provide support to elderly and isolated people, Fureai Kippu schemes have to find a balance between the accounts of younger and fitter members – whose main reason for being involved is the desire to help other people – and the neediest older people, for whom it is more difficult to earn credits. This issue is addressed in two ways: by offering volunteers a mix of time credits and cash payments and by allowing younger members to accumulate credits they can exchange for services when they become sick or elderly, or transfer to someone else. Anecdotal evidence suggests that people prefer services paid in Fureai Kippu over those paid in yen, perhaps because of the personal connection.<sup>10</sup> People can also have the ticket itself paid in yen (the price of a home-cooked meal).

### Impact and evidence

We know from research that time-based exchange schemes can have a variety of outcomes. Some of the most common outcomes reported across the literature include;

- Improving the well-being of those taking part.
- Improvements to physical and mental health.
- Improving social connections and increasing social inclusion for typically marginalised groups.
- Improved employability and skills.
- Reducing isolation and improving people's experience of services.<sup>11</sup>

We also know time banks are able to engage excluded people better than conventional volunteering, and that time-based exchange schemes release a vast amount of resource from both people and organisations which is often under-valued.<sup>12</sup>

There is very little cost-benefit analysis of these models, though what there is suggests that time banks can achieve savings, especially in health and youth justice. But, without long-term research, it is hard to pinpoint the causality. One of the exceptions to this is the recent London School of Economics study which concluded:

*“Examples of positive physical and mental health impacts, improved employment prospects and decreased reliance on alternative forms of paid and unpaid support have been attributed to time bank participation. The results of our modelling suggest that the cost per time bank member would average less than £450 per year, but that the value of these economic consequences could exceed £1,300 per member. This is a conservative estimate of the net economic benefit, since time banks can achieve a wider range of impacts than those we have been able to quantify and value.”<sup>13</sup>*

Other cost-benefit analyses have been limited to specific services or organisations, but show promising results for the value of introducing time banks and service credits to public services. These include:

- The value of people's contributions to the service are often underestimated, or ignored altogether. One recent New Economics Foundation report on the Holy Cross Centre Trust time bank used an SROI analysis to calculate time bankers contributions over one year at £137,119.
- There is a proven ability of time banks to improve personal well-being, mental and physical health, reducing demand on acute (and costly) services. Outcomes of MORE's activity are documented to include well-being, confidence, skills and employability and one report calculated the activity of members to a monetary value of \$3.5 million from 1991 to 2008.<sup>14</sup>
- Time banking can reduce youth crime and create a greater sense of community: one Spice report documented a 17 per cent reduction in crime following the introduction of a time bank to the local boys and girls club.<sup>15</sup>

### Time banks, service credits and public services

This category of reciprocal exchange systems offers attractive solutions for public service institutions which need to tackle social isolation, boost social networks and community resilience, build people's capacity and reduce demand for services over time. These solutions can be commissioned directly or delivered in partnership with local infrastructure.

Schemes in this category tend to have a strong local focus and most of them work at neighbourhood level – even if they may have

functions that cover wider geographical areas. It is generally local units – surgery, hospital, housing estate, school – that are best equipped to deal with this scale, but paradoxically they have the most difficulty finding the resources to do so. There are examples of local authorities and PCTs investing in time banking infrastructure and commissioning time banks as part of a mix of integrated services.

## PART 3:

# REWARD POINTS

**R**eward points are simple systems, private currencies which are used to motivate members, customers, citizens or users to shift their behaviour in some way. The credits are simple because they are issued by the organisation in charge and deleted when they are redeemed. The complexity comes not from circulation and re-use, but from the range of rewards they can be spent on. These currencies can use wasted capacity and create extra value by re-directing this capacity to fuel solutions to corporate problems.

Reward points can be used for nudging behaviour, including reducing emissions, building loyalty or recognising effort. There may be examples of co-production on a much bigger scale, like the Washington Youth Court which attempts to reform the city's entire youth justice system.

The difference between schemes belonging to this category and time banks is partly about scale. Schemes in this category potentially have a much broader, and therefore more impersonal, reach. They often therefore need to use smartcards or the Internet to work. Their challenge is how to retain an element of altruism at the heart without human contact.

Although they are mainly simple, many of these systems have ambitions to grow into something more complex, as currencies in their own right. The Internet currency beenz planned to do that; the Interra project and the SOL still do. It remains to be seen whether they manage to migrate from one typology to another.

### History

Reward points have a long history, dating back to 1896 when a US company called Sperry & Hutchinson began offering trading stamps to retailers in 1896. They used these to give bonuses with every purchase and the stamps were given away at filling stations, corner shops and supermarkets. When the customer had collected

enough, they could spend them on goods from the S&H Green Stamps catalogue. Green Shield Stamps, as they were known in the UK, suffered from hyperinflation in the 1970s and disappeared finally in 1986, but by then the idea had been taken up by airlines. There are now more than 90 frequent flyer programmes around the world, with over 100 million members – not including the programmes started by hotel chains, car rental companies or supermarkets.

People are familiar with this idea in the UK through mainstream reward points schemes like the Tesco Pluscard or Nectar. There have also been town centre loyalty points schemes (Loyal to Leominster, for example) and schemes like the Wedge Card which offer discounts rather than points. Most recently rewards schemes have been applied to youth policy, with Karrots schemes run by local police forces and the national Connexions scheme, and the new national reward scheme launched by youth charity Young Scot.

Rotterdam's ambitious NU-spaarpas only lasted little over a year in 2002, providing reward points for people behaving in a sustainable way. But this is now an area with considerable energy, including new ventures like Blue Dot and Wiganplus and other local government ventures linked to Recyclebank and the Big Society programme.

*Legal status:* Reward points are regulated under the FSA by the e-money regulator. Accountants have to include them in balance sheets.

### Examples

There is a whole range of different examples of these kinds of schemes. In their own way they are drawing inspiration from both the old Green Shield Stamps idea and, more recently, from the city of Curitiba in Brazil which hit on the idea of rewarding people for cleaning up the city with spare capacity on the buses. These schemes increasingly depend on sophisticated IT systems. This category should also include

major motivational payment schemes like Brazil's Bolsa Escuela, and – at the other end of the spectrum – major programmes of motivation and co-production using the time bank model, like the Washington Time Dollar Youth Court, where youth offenders are judged by a jury of peers, who earn time credits through jury service and can exchange them for computers.

Examples include:

#### **Direct municipal exchanges**

This refers primarily to the famous system that began in Curitiba, the capital of Paraná state in southern Brazil, a modern city of about 1.6 million people. Former mayor Jaime Lerner was famous for his innovations and this one was about solving a recycling problem. Two-thirds of Curitiba's waste is now separated and recycled and collected weekly. But the collection lorries are too big to go up the steep slopes and narrow passages in the old part of the city where the poorer people live. So Lerner made the rubbish itself a potential currency, offering to give bags of eggs, fruit and vegetables if people bring their waste bags of rubbish to collection points the lorries can get to. People can also exchange rubbish for bus passes, using spare capacity on the buses to clean up the city. Children are encouraged to collect waste materials for recycling and receive good quality toys made from recycled plastics in return.

Rubbish is recycled in a plant which gives jobs to disabled people and former alcoholics who have trouble finding work elsewhere. The recovered materials are sold to local industries. The programme costs no more than landfill, the city is cleaner, there are more jobs, farmers are supported and the poor get food and transport. The bus tickets allow a further twist to this system. These tickets in turn can be exchanged for schoolbooks or groceries. In its first year, 11,000 tons of refuse were exchanged for one million bus tickets and 1,200 tons of food.

Similar to this idea is the Brazilian scheme *Ecoelce*, which allows people to pay their electricity bills by recycling solid waste. Coelce is the energy distributor in the north east region of Brazil. The city of Fortaleza, where the scheme is based, now has 59 recycling centres. An amazing 57 per cent of scheme members paid their entire electricity bills in recycled waste.<sup>16</sup>

#### **Green points**

The most ambitious green points scheme was NU-spaarpas in Rotterdam. The NU-spaarpas was launched in 2002 as a collaboration between

the Rotterdam Municipal Authority, Rabobank, and Stichting Points (formerly the currency consultancy Barataria).

NU-spaarpas was a complex project with an attractive smartcard, involving 100 local shops or services and about 11,000 card holders. Its basic purpose – to help the council save money by encouraging people to bring their own bulky waste to the depot – was realised.<sup>17</sup> But, during the trial period, it became apparent that there was no future for the NU card scheme without substantial contributions from various partners, which were not forthcoming. There were savings for the council's waste department but the economic return for the other partners was less unambiguous.

The scheme had two positive incentives for sustainable behaviour: saving the points with sustainable purchasing behaviour, and spending the points on sustainable goods and services. Hence each euro spent had a double impact. Enterprises (with a focus on SME) and governmental organisations issued and redeemed the points. Consumers could subscribe at several places in the town. For the sake of simplicity one NU-point had the communication value of one euro cent.

Buying green sustainable products was rewarded with a quadruple incentive. Sustainable products included labelled organic, energy-efficient and fair-trade goods, bicycles, green financial products, renewable energy, rental, repairs and second-hand goods. The points could be cashed for public transport, culture and arts, the zoo and education.

#### **Town centre loyalty points**

During 1991, a number of innovative schemes emerged organised by embattled high street shopkeepers to fight off the influence of out of town stores. Loyal to Leominster (run by the local butcher) and Love Midsummer Norton received huge publicity, but they were largely unfunded and run without IT support and could not last.

More recently, the idea has emerged among a consortium of developers and smartcard operators in Wigan as the Wigan Plus card, launched in 2010 by Hometownplus.<sup>18</sup> The organisation builds on work done with paper-based loyalty schemes around healthcare in Dumfries, and employability initiatives in Alloa. Organisers are pleased with the response and are now working with local volunteering organisations to bind volunteering into the scheme as well. The evidence suggests the card will be popular and

the idea is being rolled out elsewhere.<sup>19</sup>

The American equivalent of Hometownplus is the ambitious Interra Project.<sup>20</sup> This includes the visionary former Visa CEO Dee Hock on its board and already has four community cards to encourage local shopping. The UK alternative is John Bird's Wedge card, but this does not so far earn points of any kind, despite offering discounts in local shops.<sup>21</sup>

### Family support

The Brazilian Bolsa Escuela, now Bolsa Familia, is not really an exchange system, but it is reciprocal and this is why it is included in this category. It is now a key part of Brazil's welfare programme, giving scholarship aid to the poorest families on the condition that their children attend school. Bolsa Familia has extended this idea, giving aid on the condition that they also get vaccinated.

Bolsa is the biggest conditional cash transfer programme in the world, costing about 0.5 per cent of Brazilian GDP and around helping 11.2 million families (around a fifth of the population).<sup>22</sup> Poor families with children receive an average of \$35 (US) in direct transfers. The scheme helps to reduce current poverty, and gets families to invest in their children, breaking the cycle of intergenerational poverty. It is also believed to be among the world's best targeted programmes, because it reaches those who really need it. As much as 94 per cent of the funds reach the poorest 40 per cent of the population. Studies prove that most of the money is used to buy food, school supplies, and clothes for the children.

Success has sparked adaptations in almost 20 countries, including Chile, Mexico, Indonesia, South Africa, Turkey, and Morocco. More recently, New York City announced its Opportunity NYC conditional transfer of income programme, modelled on Bolsa Familia and its Mexican equivalent, an example of a developed country adopting and learning from the experiences in the developing world.

### Impact and evidence

Curitiba's rubbish scheme and the Bolsa Familia are enormously successful. So are commercial applications like Nectar Points. But Nu-spaarpas fell at the first hurdle and a scheme run by Connexions was terminated early. Part of the problem seems to be that it is always hard to engage someone to earn points, unless they are hugely valuable or collecting them is extremely easy and convenient. Self-interest may struggle

with the more enlightened reasons why people might change their behaviour, and these schemes rely on an element of self-interest. They therefore require verification and safeguards which schemes in the previous category usually do not need. Yet they are intended, not just to change behaviour, but to change attitudes.

The outcomes achieved through this type of exchange vary hugely depending on the objective of the service or programme. For example, the Bolsa Familia aimed to improve take up of health services and educational attendance, while the Washington Youth Court focussed on reducing recidivism. Despite the small amount of research there are a few models, such as the Bolsa Familia, which have had rigorous evaluations that provide an insight into their impact. Some of the most compelling evidence from these evaluations is set out below:

- The Bolsa Familia has evidence of improved school attendance, an increase of life expectancy by three years, increases in health indicators and a decrease in the child labour rate, from 16 per cent to 11 per cent.<sup>23</sup> The programme has been attributed with bringing millions out of poverty, and has been scaled out to reach over ten million people.
- The Curitiba scheme has catalysed recycling, provided livelihoods and maintained a clean living environment for the city's poorest citizens. 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.<sup>24</sup> The model has seen the average income in Curitiba rise to three times that of the Brazilian average.<sup>25</sup>
- There is evidence that youth courts or peer tutoring can improve outcomes for the youth justice system while also saving money, as the costs of the youth court are below that of a state court. Certainly the Washington Youth Court has reduced recidivism from a state average of 25 per cent to 9 per cent, and almost 100 per cent of parents feel their child has stayed out of trouble by being involved in the youth court.<sup>26</sup>
- The NU-spaarpas project showed that stimulating citizens to behave differently can work. On average, a NU-cardholder used the waste-collection stations 1.5 times more than before, creating savings for the municipality. The programme demonstrated to SME retailers that there was a strong market for

sustainable goods. By the end of the project, different retailers had changed a part of their offering in favour of sustainable products.

One of the challenges of building the knowledge base on these models is that complex schemes find it especially hard to work out where the causality is: the introduction of Karrots in Southwark was followed a few months later by a 17 per cent drop in local youth crime (though this did not continue).<sup>27</sup> But it was unclear whether this was linked to the points, or another factor.

What evidence there is for this model 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 or environmental purposes. Given the right support, schemes can be self-financing or even money-saving.

### **Reward points and public services**

Schemes in this category are usually bigger than time banks. They typically require significant investment in IT and aim to bring about change at a greater scale and therefore are most likely to be successful when public agencies at regional or national level are involved.

The agenda here is about ‘nudging’ people. Reward points can help public agencies bring about desired change when they are confronted with a target population which is slow to shift their behaviour, whether the problem is a shortage of volunteers, a slowness to recycle or a failure to stay loyal to the town centre.

However, nudge schemes can present issues of political acceptability where they are perceived as manipulative. Schemes which, as in Curitiba, make direct connections between spare capacity and intractable problems present a really interesting model that, given the right conditions, could be tried in the UK.

## PART 4: LOCAL ECONOMIC EXCHANGE

**R**eciprocal exchange systems in this category aspire to be currencies, to work alongside or even replace money, with the intention of making the local economy work more effectively and efficiently. It is the economic objective which defines these exchange systems compared to the schemes profiled in the other categories. Their core purpose is to rebuild connections between people and assets inside local economies, though their by-products include more convivial outcomes as well. They are also designed for improving people's skills and employability, using local resources more effectively, valuing local waste and tackling poverty.

Local currencies normally have a geographical limit, which gives them a local premium of some kind. If a local currency is working well, it can bring wasted local assets into better use – actual waste as raw materials or 'wasted' people. It will also create an environmental benefit because the value added to what is local or locally produced results in less trucking in of imports.

The usual problem is that, without major investment and ambition, it is difficult to get people to choose unreliable and untried local money over traditional money. People may do so for political or social reasons, which is why local currencies have strayed over the boundary of this typology, offering themselves sometimes as social or community building currencies.

### History

The idea of new media of exchange goes back throughout history, notably to Benjamin Franklin's efforts with the printing press. The tradition of local currencies has continued in North America ever since, emerging at times of recession – particularly in the 1930s and early 1990s. The Ithaca hours system in upstate New York emerged in 1991, and inspired a range of new printed currencies in North America, while Local Exchange and Trading Systems (LETS) were

growing during the same period in Europe.

The success of the BerkShares currency in the USA since 2006 has also inspired new kinds of currencies in the Transition Towns movement. But the real innovation has been happening in Latin America spurred by economic difficulties starting with the Argentine debt crisis, and culminating with the adoption of the idea by the Brazilian Central Bank.

There was considerable interest in LETS as an anti-poverty strategy among local authorities in the UK in the late 1990s. More recently, the Transition Towns movement has given rise to ambitious printed currencies in Totnes, Lewes, Bristol, Brixton and Stroud. Their ability to innovate and move forward now depends on the attitude of local authorities, on the new European e-money directive and on the position of the credit unions.

*Legal status:* local currencies are taxable in national currency (only Uruguay accepts tax payments in community currency). In Ireland and New Zealand, the benefits issue has been resolved with informal agreements. In the Netherlands, members can earn up to 3,000 units of local currency without it affecting either benefits or income tax. In Australia, the government now explicitly encourages systems of this kind.<sup>28</sup> The UK does not.

### Examples

This category presents a variety of schemes, ranging from LETS and the many variants of this kind of virtual currency, through to the printed notes of Ithaca hours or of BerkShares and the Transition currencies in the UK. This category should also include the successful German currencies which carry negative interest rates, like Regiogeld and Chiemgauer, and the Global Barter Clubs of Latin America and those that succeeded them, like Brazil's successful community banks.

Examples include:

### Local exchange trading systems (LETS)

LETS networks use locally created interest-free credit to enable transactions that do not require direct swaps between members. For instance, a member may earn credit by doing childcare for one person and spend it later on carpentry with another person in the same network. In LETS, unlike other local currencies, no scrip is issued, but transactions are recorded instead in a central location open to all members. Credit is issued by the members for the benefit of the members themselves.

Michael Linton's first LETS system began in the small mining community of Courtenay in Canada in 1983, but linked the value of the currency to the Canadian dollar, which was necessary as a way of attracting local business to join. It was given widespread publicity, and in the next two years, 500 members traded \$300,000.<sup>29</sup>

There were 200 LETS exchanges in Australia, starting with the alternative community of Maleny in Queensland, and moving on to what became the largest system of its kind in the world – Blue Mountain LETS, with 2,000 members. A support group, Letslink UK, was set up in the UK in 1990. By 1996, an estimated 35,000 people were involved in the UK alone.<sup>30</sup>

Many of the LETS exchanges in the UK specialised in different sectors. The sometimes absurd names of the currencies reflected local interests and added an extra spice to the idea. In Donegal, in the Republic of Ireland, people traded in sods. In Milton Keynes it was concrete cows. In Salisbury, children had their own currency, *kebbles* (Kids Exchange and Trading Scheme – adults used *ebbles*).<sup>31</sup> Most of these schemes were co-operatively run, and most linked their currency in value to the pound, but there were 12 *tins* to the hour in North West Dartmoor, five *palms* to the hour in Falmouth and 12 *brights* to the hour in Brighton.<sup>32</sup> Credit limits were mostly around the equivalent of £500.

Evaluation supported claims that LETS encouraged local trust and friendship – especially for the unemployed.<sup>33</sup> Two-thirds of unemployed LETS members reported an increase in their social networks. Research suggested that involvement increased skills and self-esteem.<sup>34</sup> That combination of local trust and spending power had the potential to make things happen at a local level, like the partnership between Manchester LETS and Manchester City Council to re-open and renovate a popular Victorian Turkish baths.

A Gulbenkian Foundation report showed the idea was adaptable to other problems too.<sup>35</sup> Islington Council backed a LETS Build pilot scheme, to bring accommodation into the LETS economy. Bristol, Gloucester and Stirling were among those linking LETS to allotments to make food available to people on low incomes in return for their time and effort. And Stirling LETS had a food co-operative that pays for its packing and delivery service in the local currency, known as *groats*.<sup>36</sup>

LETS remains the model for successful currencies in parts of continental Europe, in Australasia, the Far East and South Africa.

### Printed fiat currencies

Ithaca hours, launched in upstate New York in 1991, became the model for a range of similar currencies eventually spreading to 66 other US towns.<sup>37</sup> The Ithaca community activist Paul Glover became interested in money when he was working on a radical plan to improve the flow of energy around Los Angeles. Glover believed that, because a local currency could only be spent within a 20-mile radius of Ithaca, it could stem the flood of buying power out of local economies.

Printed Ithaca hours<sup>38</sup> notes in denominations of one hour, two hour, half hour, quarter hour and eighth hour (hours are worth \$10 – the hours is misleading; this is not a currency based on time) are issued into the economy every month in three ways:

- In payment to people who advertise in *Ithaca Money*, the bi-monthly tabloid newspaper which lists the main businesses and services accepting hours – in return for their public backing and for keeping their entries up to date.
- In grants to local charities and non-profit groups: 9.5 per cent of every month's issue is decided by the 'Barter Potluck' – a meeting of anybody interested on the fifteenth of every month.
- In interest-free loans to local people and business.<sup>39</sup>

Hours have been shown to give a marketing advantage to local businesses which accept them, provide more income for people on the margins of the economy, substitute local products and services for those flooding in from outside – and make the local economy more sustainable, diverse and able to survive recession or inflation. Recent reports suggest the Ithaca scheme is not currently thriving, but at its height the currency was

accepted at over a third of the town's shops, and is backed by the local chamber of commerce and some local banks.

### Transition currencies

The various Transition Town currencies (including Totnes, Brixton, Stroud and Lewes) are based on the model of the *BerkShares* currency in Great Barrington, Massachusetts, launched by the E. F. Schumacher Society (now the New Economics Institute).<sup>40</sup> These currencies are printed by the organising body, and bought at a discount for the national currency, usually via an intermediary like a local bank. This means that their value is backed by an equivalent or proportional deposit in national currency, which earns interest in the bank ('backed currencies' in the next section refers to currencies which are backed by something other than conventional money).

Launched in 2006, BerkShares had huge press coverage and \$1 million worth were circulated in the first nine months (over \$2.7 million to date). More than 400 businesses signed up to accept the currency. Five different banks have partnered with BerkShares, with a total of 13 branch offices now serving as exchange stations.

The Brixton *pound* (B£) was launched in 2009 along similar lines and with support from Lambeth Council. Currently it is a paper-voucher scheme backed 1:1 with sterling.<sup>41</sup> Around 180 businesses accept B£s with £30,000 in circulation (mainly confined to Brixton). The council supported the scheme with a grant of £6,000 towards printing the notes and other in-kind support. Lambeth Council estimates the scheme was worth about £150,000 to the borough in terms of positive media coverage (estimated by mentions in various media outlets) and has helped make Brixton town centre a more attractive venue for inward investment. Lambeth Council has also committed to supporting the digitalisation of the B£ as one of its early adopter co-operative council pilots and exploring how it could integrate with its plans for a Lambeth wide incentive scheme. London Mutual Credit Union (incorporating Lambeth and Southwark) became the official B£ 'bank' in April, offering issuing and exchange functions and holding the sterling reserve to be used to enhance their capital base and make ethical, low interest loans.

Anecdotal evidence suggests that these currencies find it hard to sustain local interest without investment in constant marketing. There also appear to be major transaction costs for both businesses and customers, a challenge that may be overcome by the introduction of

electronic payment options as is being developed in Lambeth and Bristol.<sup>42</sup> These schemes are too new for major evaluation, although initial evaluations of the *Eco-Pesa* in Kenya, a local currency with dual environmental and economic aims, show it has been successful in strengthening the local economy, and effecting behavioural change.

### Community banks

Brazil is probably the country where local exchange systems are now most developed, largely because the Central Bank, having filed and lost a legal action against local currencies, has turned into a supporter of these initiatives – the only central bank in the world to do so. There are now 51 community banks in Brazil, issuing and managing social currencies – treated legally as food and transport tokens – but also organising microcredit loans in both local and national currencies.<sup>43</sup>

The community banks are often based in poorer districts and offer conventional loans at only 2 per cent APR or a social currency loan at no interest (for small loans). People can access these loans, bypassing credit protection agencies if neighbours vouch for them. The loans inject life into the social currency exchange system by creating demand for the social currency that other systems lack. Only shopkeepers can convert the social currency back into national money. Each community bank has a different name for its currency, and logos are chosen locally.

In 2003 the Banco Palmas Institute, the first community bank, created the Rede Brasileira de Bancos Comunitarios, of which all community banks are members. There are worries among economists that social currencies might create inflation. In order to prevent inflation, social currencies need to be based in places where the economy is slow. There are plans for creating 300 community banks.<sup>44</sup>

### Impact and evidence

Local exchange currencies are largely experimental. Only in Latin America are they approaching the mainstream, though there are patches of early success elsewhere. Even in Argentina, the development of currencies was marked by a huge explosion and a huge collapse. The involvement of the Central Bank in Brazil may mark a whole new departure – with local currencies accepted as a public policy instrument to tackle poverty.

These currencies need to reach critical mass before they can succeed, and this is difficult to achieve in one leap. Research into the Regiogeld in Germany suggests that any local currency will need at least 200 local shops which take the currency to get the kind of range that is needed.<sup>45</sup> Attracting a major partner can help currencies reach a sustainable scale quickly.

Research is sparse in this area, and what research there is tends to be qualitative and anecdotal. The explosion of local exchange systems in Latin America since 2007 suggests that there may soon be more robust findings. Existing research suggests that:

- Local currencies can improve people's social networks and help them towards jobs, just as time banks can.<sup>46</sup> Successful local currencies can also increase the use of local resources, and local people, by the economy, which means reducing dependence on energy-intensive imports.
- Specific work done by Gill Seyfang showed that LETs can be a strong model to build the local economy, for improving the employability of people who are unemployed, and for mitigating some of the worst effects of recession periods on individuals.<sup>47</sup>
- The Argentine experience suggests that a robust local currency and exchange system can make a real difference to people and economy during economic crises. Their Global Barter Clubs were used by around two million people during the worst years of national bankruptcy.<sup>48</sup>
- A recent evaluation of the Eco-Pesa programme, a complementary currency based in Kenya, found it increased participating business income by 22 per cent, enabled the collection of 20 tonnes of waste and resulted in the creation of three community nurseries run by young people.<sup>49</sup>
- There is little evidence that the paper-based currencies in the USA have had significant impacts on local economic development so far – though there are circumstances in which they might.<sup>50</sup>

## Local economic exchange and public service

Local exchange systems are not only ways of rebuilding local economic diversity and connections, but also a way of maximising the use of local resources. The increasing interest among local authorities in local economic exchange suggests that there is a role for these exchange systems beyond economy-building, for example in anti-poverty strategies. Local authorities can use local currencies to provide low-cost loans, give discounts or rewards creating an extra 'off balance sheet' economic dimension that can support the delivery of their goals.

Local authorities in Latin America and France in particular have been deeply involved in the development of local exchange systems designed to rebuild or shore up local economies. Although it can be hard for local currencies in developed countries to break out of alternative culture,<sup>51</sup> at the height of interest in LETS currencies a whole range of inner city local authorities in the UK experimented with exchange systems. There are currently ambitious plans among the UK Transition currencies to link to local procurement strategies and to accept business rates in local currencies.

## PART 5: BACKED EXCHANGES

**E**xchange systems that aspire to have national or international coverage tend to need something to underpin their value beyond local convention. This section covers this category of exchange system: they are all backed by the value of something tangible, and not usually money. This something may be the value of business stock, or local products or energy. What makes these exchange systems different from schemes in the other categories is that backing gives them a formality and safety which is not always open to the others.

Their purpose is also varied, ranging from giving extra value to local renewable energy, to supporting local farmers in difficult seasons and periods, providing a reliable currency as store-of-value, and – perhaps most relevant at the moment – supporting small business. They include not just currencies, but also web-based exchange systems which create new markets using car parking spaces or spare couches. The nature of all these systems is that they are designed to work beyond the local.

### History

The idea that money might be linked to a basket of commodities was put forward originally by the doyen of investors, Benjamin Graham, in 1944.<sup>52</sup> It was influential on the debate at the Bretton Woods Summit, which in the end rejected such an idea, though Keynes put forward the idea of a global-backed currency called the *bancor*.

The idea was revived in the inflationary 1970s by one of the founders of the green movement, Ralph Borsodi, who launched a currency called the *constant* in Exeter, New Hampshire. Those around him, new economist pioneers like Shann Turnbull in Australia and Bob Swann in the USA, put forward variants on the idea, suggesting that money might be backed by local renewable energy. Swann went on to launch a similar currency designed to provide support for local farmers. At the same time as these revolutionary

ideas, business barter has been growing fast around the world, especially since the 1980s. The emergence of the Internet has also seen a wide range of non-monetary assets exchanged, including lifts and places to stay.

*Legal status:* Barter is taxable in national currency. Otherwise these schemes are taxable in theory, though sometimes not in practice. The legal position of some of the experimental ideas is not yet apparent.

### Examples

There are broadly four kinds of examples in this section:

- New kinds of exchange currencies designed to back small business, from special notes that give farmers credit to more sophisticated systems like C3 in Uruguay and other countries which are backed by the unpaid bills of clients.
- Business barter exchanges, from Bartercard to the long-established Swiss WIR system.
- Collaborative consumption schemes, which facilitate the swapping and sharing of assets, goods and skills with and without the use of money.
- Experimental ideas for new kinds of money backed by energy or commodities.

### Commodity or loan-backed currencies

STRO, the Dutch NGO and consultancy, has developed a series of new exchange systems for Latin America over the past decade.<sup>53</sup> They involve vouchers, substitute for money and are backed by the value of the crop which is being grown at the time. Farmers can use the vouchers for paying staff and suppliers. Local business networks will accept the vouchers in payment because they are backed by commodities. Loans can be issued in vouchers and paid back in a

combination of national currency, vouchers, goods and services.

The best example is the Coopevictoria, the oldest farming co-op in Costa Rica, which launched the scheme in 2007 by using the vouchers as loyalty payments to customers (2 per cent for every \$100 spent). Because there are supermarkets and petrol stations in the network, co-op employees accept part of their salaries in vouchers (known as UDIS). By last year, 32 businesses accepted UDIS. This scheme looks like a combination of local currency and reward points. UDIS are also used to pay local schoolchildren to collect waste cooking oil, which the co-op turns into bio-diesel for their farm machinery.

### Complementary factoring

Commercial Credit Circuits (C3) are an innovation by the Dutch NGO and consultancy STRO, backed by the World Bank, the ILO and the European Commission, and designed to increase the liquidity of small-medium enterprises, which face serious challenges with the withdrawal of big banks from the SME credit market.<sup>54</sup>

C3 makes it possible for member companies to use low-cost factoring services, allowing them to pay other members in C3 credits (basically promises to pay later). C3 takes on the debt, insures it against default and pays out in C3 credits. C3 turns debts into useable C3 credits and speeds up the circulation of money. There is usually a negative interest of 0.5 per cent to stop people hoarding credits.<sup>55</sup>

The C3 model was launched in 2003 in several Latin American countries (Uruguay, Honduras, El Salvador, Costa Rica and Brazil). It spread nationwide in Uruguay in 2010. All state-owned enterprises (water, electricity, public transport, communication) now accept C3 credit and taxes can be paid in C3 credit too. The World Bank has agreed to back the project with a loan of \$250 million. The idea is that, on this scale, C3 will force down the mainstream cost of borrowing for SMEs. It is also intended to reduce unemployment.

### Commercial barter exchange

WIR – short for Wirtschaftsring – is Europe's oldest bartering operation, aimed specifically at smaller companies. It is therefore a barter exchange. This scheme operates nationwide in Switzerland and it is so widespread that it amounts to a parallel virtual currency with the Swiss franc. WIR started in 1934, the brainchild of Werner Zimmerman and Paul Enz, two followers of the economist Silvio Gesell, who urged the creation of negative interest currencies. It now

has 62,000 members and a turnover of 1.2 billion Swiss Francs a year.<sup>56</sup>

WIR provides working capital to small businesses, with which they can buy goods and services from other members. While commercial barter charges between 8 and 15 per cent of each trade in national currency, the WIR system is considerably cheaper. The disadvantage for business is that they are unable to change their WIR currency – which is valued in Swiss francs – into national currency.

Members open a current account and are charged 2.5 per cent on loans and 1.5 per cent on mortgages – though this is described not as interest but as a service charge – which has to be paid in Swiss francs. Customers are also charged 0.6 per cent of the value of each cheque in WIR. Most loans are secured on a second mortgage on company property, which is possible because in Switzerland first mortgages are for no more than 60 per cent of the value of the property. The main areas of specialisation in WIR are the building trade, restaurants and food. But members also include most kinds of business – even a circus. Members pay in WIR for transactions between themselves, though not all members accept 100 per cent WIR payments on every trade.

The main crisis of the 'circle' came in the early 1970s, as members began trading their WIR currency at a discount in return for Swiss francs – which would have caused a fatal outflow of the currency. The organisers responded in 1973 with a series of measures clamping down on members who discounted the currency, and with success, because the membership tripled in the next two decades.

The quiet success of WIR has not been replicated in other European countries, partly because of the trenchant traditional opposition of local banks. But Wirtschaftsring's ability to grow and provide a service while charging considerably less than the commercial North American barter exchanges shows that there may be space for competition in this area. 2010 saw the launch of the *Kéfrank* system in western Hungary, which aspires to be like the WIR and uses printed notes.<sup>57</sup>

### Collaborative consumption

Collaborative consumption is "*traditional sharing, bartering, lending, trading, renting, gifting and swapping redefined through technology and peer communities*".<sup>58</sup> It includes a wide range of exchange schemes facilitated and enabled by the Internet and collaborative technologies, which, by building trust between strangers allow people

to swap and share spare capacity in a way that is impossible in the mainstream, because there is no market to do so.

They are in this section because the spare capacity provides a backing to the market. Many of these schemes are in their early stages. Collaborative consumption schemes includes exchanges that use money, like:

- Crashpadder.com is an alternative to hotels, allowing people to earn money from their spare space, while travellers benefit from budget-friendly, sociable accommodation.
- Zopa allows people to borrow money from each other at competitive rates of interest. This is in some ways the odd one out: it is peer-to-peer lending, and the backing is therefore financial, if it exists at all.
- ParkatmyHouse.com helps reduce the cost of parking by connecting drivers to home and business owners willing to rent out their under-used parking spaces.
- WhipCar lets people make money whenever they are not using their car by renting to other drivers.
- ecomodo.com allows people to borrow things from people who live near them.

There are also many collaborative consumption schemes that do not use cash. They barter similar kinds of spare capacity online. Examples include:

- goCarShare, which links into Facebook, allowing people to share car journeys with friends.
- Home Swappers, a long-established system whereby people exchange homes with each other for holidays.
- Couchsurfing.org which allows people to find places to stay in spare beds around the world.
- Swaptree (book and CD swapping) and Swap2Shop (clothes swapping).

The cash-less collaborative consumption schemes often have a longer track record than the ones using money. Couchsurfing dates back to San Francisco in 2003 and now claims 2.5 million members, including Julian Assange from WikiLeaks who has helped to make it famous.

## Impact and evidence

There has been almost no research to date on the impact of most schemes in this category. What research there is exists mainly in the form of feasibility studies. The development in C3 in Uruguay on a big scale will undoubtedly provide some research in the next few years. Despite the huge scale of corporate barter across the world, most economists have shunned the idea of researching it. But one important study has shown that business barter, local and international, is firmly counter-cyclical.<sup>59</sup> It means it is one of the few economic activities that can thrive in a recession. For local authorities committed to 'place-shielding', that might be important.

## Backed exchanges and public services

Schemes in this category do not, on the face of it, seem likely to be useful to public services in the conventional way. But since the prime purpose of some of them is to support local agriculture or to provide backing for local energy production, they may be useful for forward-thinking public bodies. They exist to achieve specific objectives – supporting small business, for example – but they can be used in other ways as well, even accepted *in lieu* of fines or charges.

It may be that most of the ideas in this category here are too futuristic for most public services, but there are exceptions to this. The main role for backed currencies in public services for the time being will be to break the logjam in credit for SMEs. It is possible to imagine a role for public sector infrastructure designed to support small business with low-cost loans, factoring and cash flow support – along the lines of WIR or C3. That might be a role that could be played by the new local authority banks, designed to invest council reserves profitably in local enterprise.

## PART 6: CONCLUSIONS

It is clear from this quick survey of the field of reciprocal exchange systems that, as far as public services are concerned, the most immediate area of inquiry is probably time banks and service credits. Indeed, the examples outlined in the first section of this typology are clearly leading to widespread co-production of social outcomes, and through these schemes the capacity of public services is extended and deepened.

But that is not the whole story. Looked at broadly, there are also reasons why public agencies, especially at the local level, might take an interest in schemes that appear under the other typologies.

All four typologies appear endlessly flexible and adaptable, and hard to keep quite within their boundaries. But as far as public services are concerned, their potential roles – in the short term at least – are reasonably clear:

Types	Backing	Potential role	Key challenges	Key pitfalls	Key pioneers	Best examples	Best scale
Time banks/ service credits	None	Co-production, especially in health and education	Resources to pay for infrastructure on small scale	Loss of key staff	Edgar Cahn	USA	Neighbourhood plus
Reward points	None	Nudging Incentivising civic behaviours	Ensuring points are valued	Negative impact on intrinsic motivation	Jaime Lerner	Brazil	Town, regional, national
Local economic exchange	Fiat money	Anti-poverty strategies Supporting local businesses Increasing community resilience	Reaching necessary scale fast enough	Inflation	Michael Linton, Paul Glover, Heloise Primavera	Brazil	Town, regional
Backed exchange	Real (commodity, product or service)	SME support Provide backing for local energy production	Complexity Understanding	Marginalisation	Bob Swann, STRO	Uruguay	Town, regional, national, international

The exchange schemes outlined in this typology were created to solve a set of problems that impact on public services and public outcomes more generally:

- Conventional markets do not provide appropriate measures of value to enable some exchanges which are very important – for example those that underpin the core economy (i.e. informal caring relationships) or are geared towards greater environmental sustainability (i.e. waste and recycling).
- Some things cannot be bought with money, either because that would send the wrong signal or simply because there is not enough money in the system.
- The law of scarcity that underpins conventional markets is a driver for inequality. Due to the lack of the means of exchange (i.e. money) some people are unable to access resources that could be available to them if they could trade in something other than money.
- There are often disconnections between the things that are valued by international markets and those that are valued by local people. Currencies have become international, which means that ordinary money sometimes carries too complex messages for simple local exchanges to take place using money.

Many of the exchange systems described in this typology have been in existence for years, trying to find solutions to these problems. However, unlike a decade ago, the reciprocal exchange system landscape now includes successful and mainstream models running mainly in Latin America and it seems likely that new kinds of exchange will become increasingly mainstream in the decade ahead. This is because Internet and mobile phone technology make these ideas much more practical and simpler to manage for individuals. The last few years have seen a boom of innovative energy around exchanges on the Internet, from eBay to Bitcoin.

It also seems likely that the private sector will catch up with what is happening within the next decade: there are already plans for new kinds of exchange using Facebook and Google. Boots' loyalty card has carried space for multiple currencies for more than ten years now. Mobile phone banking is now mainstream in Africa (thanks to DFID and Vodafone). This suggests that most of us will be used to the idea of multiple counting systems, probably on our phones, within

a decade or so.

Two of the sectors that have been lagging behind in the development of new exchange systems have been the mainstream banks – which have had little to do with the development of e-money since projects like Mondex in the 1980s – and government, at every level. But there are exceptions to that. The NHS is involved with time banks all over the country, and so is the Prison Service. There has been some involvement by schools as well, though not as much as in the US. A local authority has been involved, for example, in the development of the Brixton pound. There has been more involvement by the police and youth services in bigger reward projects like Karrots, Connexions and the Young Scot national reward scheme.

Given the success of some of these projects, it seems likely that innovative public services will deepen their involvement in these exchange systems – primarily because they solve intractable problems for them, but also because solving the problems saves money over the long term. In the near future, this might mean, for example:

- Embedding a reciprocal exchange model, like a time bank or similar, in every public sector outpost to underpin co-production and to reach out into the surrounding neighbourhood to rebuild social networks.
- Health insurers running their own time banks, and insuring credits so that they are available after retirement.
- Time debt owed by students before graduation, which they have to pay off by involvement in local community.
- Youth courts across the UK providing credits for college fees.
- Waste with its own value in credits.
- Cities issuing their own money via their own banks, and providing loans in it at very low interest or in exchange for fees.
- A new SME support infrastructure, possibly paid for by the high street banks, where microcredit, business coaching, local currency loans are all available.

Of course, none of that is certain. There are practical issues which need to be addressed. We do not yet know to what extent, and how, these various typologies might be combined.

We know that losing the altruism and the human element would probably be fatal for time banks, but could they share infrastructure with other systems? We do not know yet what the right balance is between altruism and self-interest in co-production. Presumably it is different for every objective, but how so? Nor have we really cracked the problem of how we pay for the infrastructure to run some of this exchange infrastructure, some of which will rely solely on websites but some of which (time banks for example) will require people to be involved at a local level.

We are also still in the dark about some economic questions. Will too much nudging create a reaction against manipulation? Is there a danger that parallel currencies will create inflation if they are linked to national currencies? How can they be kept circulating among poor people, in defiance of every economic law which suggests that the rich will begin to garner anything that is lucrative and successful?

What is clear is that, almost under the radar, there is a great deal of experimentation going on and some of it looks successful, especially in Latin America but also nearer home. There are local authorities and public services in the UK involved in every one of these different typologies in different ways, often unaware that there are others – and other countries – which are also experimenting at the same time.

The stage is set for what may well be a rapid expansion of exchange systems over the next decade, driven by the urgent need to find ways of rebuilding social networks and supporting small businesses, and by the freedom that local authorities will be allowed under the Localism Bill to develop brave new solutions. There is no doubt that it will be a learning and experimenting decade as the possibilities and the limits of these systems are tested, but – given the scale and depth of the social and economic challenges that are putting traditional public service approaches to the test in the UK and elsewhere in the world – there are bound to be innovative officials, elected politicians and professionals, who push forward the boundaries of what they can do on an increasingly ambitious scale.

# SELECT SOURCES

The literature on alternative currencies is spread across a range of sources, but the following websites were particularly useful:

- Bibliography of Community Currency Research: <http://www.cc-literature.de>
- The Complementary Currency Resource Centre: <http://www.complementarycurrency.org/materials.php>
- The International Journal of Community Currency Research: [www.ijccr.net](http://www.ijccr.net)

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