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Balancing Growth and Solidarity in the Argentine Community Currency Systems (Trueque)

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Abstract:

The study analyses the trade-off faced by social and solidarity economy initiatives when they grow from small scale initiatives regulated by reciprocity and personal exchange mechanisms to larger scale projects in which social action needs to be regulated by institutions of impersonal exchange. It combines different strands of Institutional Economics perspectives to examine the experience of the *Trueque* in Argentina, a complementary currency system that grew to engage 2.5 million participants. For social and solidarity economy initiatives like the *Trueque*, this research shows that scaling up is possible within the limits defined by the interpersonal transfer of trust, the reputation of the leaders to act as a linchpin for the system, and the ability to sustain the process of institutional innovation. A necessary condition is the construction of a discourse of scaling up that would structure the initiative and the agents towards that goal.

Bio:

Georgina Gómez is a lecturer at the Institute of Social Studies of Erasmus University Rotterdam. She has published on alternative economic spaces, local development and various aspects of the Argentine Complementary Currency Systems *(Redes de Trueque),* including *Argentina's Parallel Currency: The economy of the poor* (Pickering & Chatto, London)

Introduction

The concern that social and solidarity economy (SSE) initiatives should scale up to increase their economic impact and efficiency needs closer scrutiny. On the one hand, the connection between SSE initiatives and the principles of locality, solidarity and small-scale are almost automatic. According to some authors, these principles are inseparable from the social and solidarity economy. They are its fundamental cornerstone and core belief of its participants (Peter North, 2005; Moulaert and Ailenei, 2005: 2048). On the other hand, capitalist discourse presents local, small, and not profit-maximizing economic schemes as essentially inferior in terms of efficiency, rationality, universality and productivity (Gibson-Graham, 2008). SSE networks are seen as too small scale, too local, too ephemeral and too dependent on the limited resources of members (Peter North, 2005). SSE alternatives need to scale up to be effective and have more economic impact. However, the understanding of the processes and implications of scaling-up is still modest, especially in relation to losing inclusiveness, local embeddedness, and meaning for the SSE members. This article seeks to study the processes in the context of complementary or community currency systems.

Community or Complementary Currency Systems are schemes in which groups of individuals exchange goods and services using a self-created and self-regulated currency. The means of payment is voluntarily accepted by the members of the networks, normally composed of individuals but sometimes businesses and local government agencies as well. In English-speaking countries the best known variants are the LETS and the Time Banks. Their advocates promote them as environmentally friendly initiatives to insulate the local economy from the downturns of the national and global economies, enhance social cohesion within a community, and sustain livelihoods during periods of economic distress (Pacione, 1999; Seyfang 2001; 2002). They operate in 56 countries and the largest ones have managed to attract a few thousand members, but in Argentina they grew to massive scale and scope.

The Argentine variant was called *Trueque* and was one of the income-generating schemes created within the SSE as a response to the neoliberal structural reforms of the nineties. Between 1995 and 2006 Argentina hosted the largest contemporary experience with a complementary currency system. The organisers made the conscious choice to scale up the scheme in a sort of "Keynesianism from below", as one of them termed it. Each group or network used its own currency and chose its organisational arrangements and standards of monetary regulation. The *Trueque* reached its peak in terms of membership (2.5 million members) during the worst crisis in Argentine economic history, which slashed 25% of the GDP between 1998 and 2002. Their demise, however, started right after that peak. As much as their organisers tried to find ways to regulate the economic activity of 2.5 million households, in most cases they failed and the *Trueque* declined sharply in terms of participants in the last half of 2002. Some groups and networks, however, fared the demise better than others and were active a few years longer (North, 2007; Gómez, 2010). This trajectory makes the *Trueque* an excellent case to discuss the challenges that growth in scale and scope poses for the schemes of the social and solidarity economy, in this case, centred on exchange.

This study delves into the growth of the Argentine community and complementary currency systems with several guiding research questions. What challenges and advantages appeared with the growth in scale, understood as an escalation in number of members, geographical coverage and diversity of products? How did it affect social cohesion and economic impact? The analysis builds off Douglas North's distinction between personal and impersonal exchange. Personal exchange is characteristic of small and local community schemes, which are loaded with values and shared meanings but often remain limited in their social impact and income generation effects. Impersonal exchange addresses larger economic circuits, like the regular economy of a region or country, in which economic action follows institutions. Economic historian Douglas North describes impersonal exchange as more efficient, productive, durable and capable of unleashing economic development in the long term, but warns about the increases in uncertainties and transaction costs that it entails in comparison with personal exchange. For social and solidarity economy initiatives this study shows that scaling up is possible within the limits defined by the interpersonal transfer of trust, the reputation of the leaders to act as a linchpin for the system, and keeping the process of institutional innovation active.

Three periods of fieldwork were done to gather data at the level of organisers, intermediate coordinators and the members of the *Trueque* networks. The first period was from January to April 2003, the second from May to December 2004 and the third from November to December 2006. The initiators of the *Trueque* were interviewed extensively and repeatedly in order to reconstruct the evolution of the scheme based on oral history. Another round of interviews was conducted with leaders at the regional and local networks and a survey with a semi-structured questionnaire was distributed to participating households and it resulted in 386 responses. The next sections discuss the literature on scaling up of SSE and the transition from personal into impersonal exchange. These will be followed by an analysis of how scaling up took place in the *Trueque* and the challenges that appeared until the network broke up. The paper concludes with some reflections on the implications of scaling up for SSE initiatives and the three necessary conditions that could sustain it.

SSE as institutional innovation

Advancing social economy initiatives is about creating new values and institutions, as proposed by Frank Moulaert and others (Moulaert and Nussbaumer, 2005; Moulaert and Ailenei, 2005).The authors show that when established mechanisms of economic growth and distribution falter, ingenuous social forces may develop new social and economic spaces with original mechanisms of solidarity and redistribution to satisfy material and immaterial needs. The authors analyse the social economy as *social innovation* because it generates institutional innovation, that addresses new forms of social relations and governance, and innovations "in the sense of the social economy", that transform the mechanisms for the satisfaction needs by bringing back social justice to local communities and expressing solidarity and reciprocity. Shared moralities of solidarity and reciprocity embed economic relations at the local level and can constrain self-interest, allow actors to bypass the limits of pure rationality, and modify the interactions typical of anonymous markets (Granovetter 1985, 1992). For instance, it is the case of economic activity embedded in social relations of family, religion, and ethnicity (Beckert, 2003).

Most economic activity is embedded in ties of various qualities and some degree of trust among actors is essential even in atomised market exchange relations to let the parties believe in the fulfilment of transactions (Etzioni, 1988; Zelizer, 1988). Luhmann (1996) defines trust as a set of expectations about others' actions that could result in a negative response if not fulfilled. It thus affects decisions to act in a certain manner, reducing exchange risk and uncertainty and diminishing the likelihood of having to enforce contracts. Among the benefits of trust are that agents exchange fine-grained information, solve problems together and can generally arrange the coordination of their economic actions in a more effective way than on the basis of the information contained in prices (Helper, 1990; Larson, 1992).

Going back to the conceptualisation of the SSE proposed by Moulaert and Nussbaumer (2005), its first aspect was institutional innovation. Institutions are socially embedded systems of rules, in which rules are tendencies to behave in certain ways (Hodgson, 2006). They have the logical format of "do Y in situation X". Society indicates one specific action Y is the acceptable one while nature makes various actions Y possible in circumstances X. Agents may reject to act in that way and do it differently by virtue of their agency, but that does not mean that the inclination does not exist and if the action effectively taken is different to the action Y specified in the rule, it will be seen as a deviation to what others expect. Institutional innovation in relation to the SSE hence represents a process by which institutions are changed bottom-up and include collective action, negotiation and contestation at the local level (Gomez, 2009). The action Y that is acceptable in circumstances X changes by the reciprocal agreements of a specific community.

The process of institutional change that binds a community is sometimes portrayed as the result of communities of cooperation. Moulaert and Nussbaumer (2005) consider that institutional innovation kindles cultural emancipation, social cohesion, interpersonal and intergroup communication and collaboration and decision-making mechanisms. However, Hollingsworth and Boyer (1997) contend that institutional innovation is political as much as a social process in which agents pursue divergent interests. They argue that institutions are either points of compromise between actors with divergent interests or frozen points of power asymmetries in which powerful groups are able to cement their strength. SSE initiatives, with their shared morality of solidarity and reciprocity, connect to the local institutions and may reproduce the same power struggles and asymmetries present in the community.

Scaling up SSE

SSE initiatives represent new ways of producing and distributing value in the local economy. They rely on trust and solidarity and, in turn, they foster trust and solidarity. This description automatically restricts them to a small scale, which also means that resources are limited and their economic impact is necessarily modest, which is contested by Gibson-Graham (2008). Complementary and community currency systems are small economic systems within a diverse economies framework. This study focuses on the exchange aspects of SSE initiatives, more than those of direct production.

Economies develop with specialisation, division of labour and diversification of new products, as has been known to economists since the times of Adam Smith and his elaboration of this in *The Wealth of Nations* (1776). Specialisation and division of labour have made possible improved productivity arising from technological change, better resource allocation and specialised production. However, specialization and division of labour are not costless, as has been acknowledged rather recently, and lead to higher risks and uncertainties generically known as "transaction costs" (Williamson, 1985). Transaction costs are defined at the micro level as costs other than price incurred in trading goods and services (Swedberg, 1990), or, from a more macro view, as the costs of running the economic system (Arrow, 1969). Williamson argues that with a well-working interface in the market, transfers occur smoothly, but otherwise, there are frictions between the parties, misunderstandings, delays, breakdowns and other malfunctions or 'market failures' that add to uncertainty and increase the total cost of exchange. Provisions need to be made to mediate the exchange of goods and services in order to allow for the benefits of division of labour and economic growth (Williamson, 1981).

At the small scale of SSE initiatives, the benefits of specialisation and division of labour are minimal, but transaction costs are a minimal problem as well. Transactions in the SSE are embedded in a social setting of trust and common values that simplifies and reduces these problems. Individuals in small groups can transfer goods between each other with 'simple personal exchanges'; that is, they engage in repeated dealings with each other and have a great deal of personal knowledge about each other's attributes, characteristics and features as well as of each other's products. Norms of behaviour are seldom written down because trust is the crucial element in facilitating transactions. Formal contracting does not exist and formal specific rules are rare and largely unnecessary. However, if they seek to scale up, the risks and uncertainties of opportunism, free-ridding, and the transaction costs start to appear. Douglas North (1989, 1990) refers to the scaling up as a transition from 'personal' to 'impersonal' exchange conditions. In a world of impersonal exchange, transaction costs are high among strangers because there are potential gains in cheating, shirking and opportunism. Measuring the attributes of what is being traded and enforcing terms of exchange becomes problematic and, even if viable, it is costly. However, production costs in such societies are lower because specialisation and division of labour are not limited to the extent and needs of the small group as agents engaged in personal exchange relationships. North (1989, 1990) sees development as a consequence of successfully achieving the institutional innovation that supports the transition from "personal exchange" to "impersonal exchange" and reduces uncertainty and complexity and allows economies to grow.

In the case of scaling up small networks, like SSE initiatives, Uzzi (1996) elaborates that trust in newcomers is extended by trusted third-party referral and previous personal relations. In a word-of-mouth system, expectations based on trust are transferred to newly introduced actors and immediately equips the new economic exchange with resources from pre-existing embedded ties. In this way, transactions are less uncertain, not as a result of what the newcomers have done but because of the social relations existing before they joined the network. Perhaps missing is the notion that negative social relations such as hatred, distrust and rivalry may also be transferred, as elaborated by Boyer and Hollingsworth (1997: 450). In subsequent scaling up, trust is allocated to impersonal, long-lasting and impartial institutional structures.

Scaling up in the *Trueque*

The first Argentine Complementary Currency System was established in a suburb in Buenos Aires in May 1995, after some time of trial and error with different mechanisms of exchange. It was called *Club de Trueque* (CT) and was initiated with 30 members as a spin–off project of an environmentalist NGO (Gómez, 2009). It expanded quite rapidly and its three leaders rapidly saw that the *CT* had tremendous potential because many people in the country had surplus goods, skills and production capacity to exchange with others. The scaling up process of the Trueque was initially gradual and then it gained momentum. Immediately after the first *Club de Trueque* became a working reality, participants started spreading the news about the scheme to relatives, friends and neighbours. That is, the initial growth in the number of members relied entirely on word of mouth and thus was still embedded in personal exchange.

As membership grew, people travelled considerable distances to participate in the *CT*. The organisers decided distant participants would be better off if they had one nearer their homes and embedded in their localities. One of the organisers, Carlos De Sanzo explained:

> It made a lot more sense to motivate people to organise a *CT* in their locality than to let them travel two hours to come here. All they needed was a group of willing neighbours and a bit of know-how, which we could gladly give.

The replication of the *CT* in other locations became an ambition of the initiators as soon as they saw the system was working. According De Sanzo, the initial success and potential of the scheme to alleviate the economic problems of the disenfranchised middle-class neighbours made them 'want to spread it everywhere'. In the hope of finding partner groups, the initiators re-established old contacts with socialist and environmentalist activists, offering workshops on the scheme in Buenos Aires city. The goal was to 'infect others with our enthusiasm', says Horacio Covas, another initiator. Their discourse clearly differs from the typical discourse of SSE and its emphasis on locality and small scale trust relations (Peter North, 2005). The desire to expand impregnated the *Trueque* with a morality that favoured growth and wider economic impact and structured agents that worked towards the scaling up of the scheme.

That goal was achieved at the beginning of 1996, when a second group was formed in the city and a third in a northern suburb. The three groups decided to stay interconnected in order to allow participants of one jurisdiction to trade in another but this created new problems. When there was a single CT, exchanges were mediated with a system of cards. The organisers would write the value of the products that participants brought to the market and the value of what they took with them. At the end of the day they would register the transactions and calculate each participant's balance. With three articulated *CT*s, this would take endless hours and set limits to how much they could expand. One of the leaders then proposed printing vouchers for fixed amounts to be used in the *CT*s. The others liked the idea because of its practicality and because it allowed participants to move across the various *CTs.* So each local market printed its own currency (vouchers called *créditos*) as means of payment, although all of them were accepted in all the others in an articulated network. Innominate currencies for either buyer or seller were the first step out of the scale of personal exchange.

The printing of vouchers to circulate as fiat currency among the participants of the various clubs unleashed the potential of the initiative as an income generation option. However, when participants started coming from three different networks and exchanged products with three different currencies, the complexity of their trade also increased and with them, the problems typical of scaling up and impersonal exchange started to appear. While all the groups shared a common past of political militancy as source of solidarity or common morality, in reality, the trust to trade with distant participants and accept their script derived in the first place from the reputation of the leaders as initiators of the *CT*. Several individuals in each group had known and trusted the initiators for several years and their trust was transferred to the other members. Barreiro and Leite (2003) report that the members' trust was mainly in the leaders, and then in the cluster of institutions that made the *Trueque*.

The mechanism by which the resources of trust expanded to the network in three localities corresponds to the process described by Uzzi (1996) as an interpersonal transfer of trust from old member to new member. 'It happened almost by inertia that participants moved to visit each other and carry their products. But we didn't see any problem in that. Everybody got to the *CT* through somebody, so everybody was trusted', explains Horacio Covas. Moreover, the exchanges across the three *CT*s were still embedded in a shared morality of solidarity, even if not strictly local. 'People were expected to behave responsibly when they joined and according to the solidarity we shared', Covas adds.

With the addition of another two *CT*s later, to make a total of five, the limits to personal exchange started to emerge. It became clear that some transparency was needed to guarantee the value of the *créditos* and price stability across the network. A rule of issuance was decided when the leaders of the five *CT*s agreed that scrip would be issued at a rate of 20 *créditos* per new participant. Each *CT* coordinator was in charge of managing the issuance of the scrip. The aim was to maintain trust in the vouchers as means of payment. Besides keeping a stable relation between products and money, it worked in practice as microcredit for new entrants to start producing and trading. Members had to return the 20 *créditos* if they left the *CT*, so the means of payment would adjust again. For the network, these rules of issuance became the first institutions of impersonal exchange as a social innovation, created explicitly, bottom-up and by negotiation and agreement of the leaders.

The process of institutional building did not always entail negotiation and agreement, but relied on the repetition of routines. Around the end of 1996 the scheme appeared in a national TV show and from then onwards the initiators started to get regular phone calls from strangers across the country on how to start a *CT*. The know-how for this became increasingly standardised and meant mobilising a minimum of 20 participants in a locality, printing vouchers (which had to be paid for in pesos), electing a coordinator and finding a venue for the market. Maintaining this model for all subsequent *CT*s was faster, cheaper and more practical than framing variants according to locality. Scaling up took priority over local embeddedness and created further problems of impersonal exchange. The transfer of trust from old members to newcomers, as described by Uzzi (1996) reached its limits because a trust relationship with the new coordinators had to be built from zero, without participants' referral. In order to accomplish this, the initiators designed training courses for prospective coordinators, to introduce them to its principles of solidarity and its environmentalist-communitarian ideology. Subsequent meetings were basically used for getting to know them and were dedicated to more practical matters like choosing the voucher to be used and organising the *CT*. With this mechanism of standardisation and training, the total number of participants climbed to 3,000 in 17 *CTs* spread in the main cities of Argentina.

By 1997 the network lived its first experience of forgery of scrip and transparent management of the *créditos* became a pressing issue. In reality, not all participants and *CTs* accepted the vouchers of all the others; this was broadly left to individual discretion. It then became clear that using non-state currency beyond the realm of personal exchange was going to need clearer rules and regulations. The initiators started thinking that it would be better to reduce the variety of currencies to reduce transaction costs, make it more practical to move around and increase the impact on the household economy. To quote De Sanzo:

> We promoted localisation as a principle, but it is a fact that people tend to travel to trade. We saw a significant dissatisfaction with new vouchers because people could not go everywhere with them. So new groups gradually preferred to use our *créditos* instead of ones printed locally.'

However, this solution to reduce transaction costs created conflicts because other groups were not willing to accept the accumulation of power involved in a cross-regional currency. In general, scaling up from personal exchange also increases the chances of conflicting interests and tensions at the interpersonal level. Nevertheless, with an inter-regional currency the diversity of supply and membership expanded further. Members became incredibly creative in widening the scope of products offered: from vegetables and fruits to clothing and shoes, books and CDs, home-made toiletries, furniture, and electronics. Some services, such as haircuts, manicures, wedding parties and Tarot fortune-telling, were offered on the market premises. Others, such as legal counselling, car insurance, taxi and courier transport, holiday packages, and education and training, were advertised on bulletin boards. Even plots of land in the countryside and livestock were for sale.

In 1997 a general gathering of *CTs* assembled for the first time. The meeting represented a new step towards building institutions of impersonal exchange. Although there were serious conflicts of leadership, it inaugurated the practice of regular meetings, however informal and unstructured. More important, the monetary system of the vouchers was organised to improve their transparency. The metropolitan area of Buenos Aires was divided into four zones (North, South, West and Capital) with a voucher each, controlled by a regional committee. After that first meeting, general gatherings became regular and formal. They established committees to discuss a broad range of issues (the meaning of solidarity, the identity as an alternative economic space, practical strategies like access to basic inputs, the relations to other institutions and organisations) and gave a major step to formalising a structure of impersonal exchange. Every CT was to have regular assemblies, among other goals to elect a coordinator. Coordinators were representatives to the regional monthly gatherings held to control the issuance and distribution of vouchers in the region. Each area committee would send two representatives to a national committee, that met once a month with representatives from across the country and was the highest body in the network. Its crucial function was to control the *créditos* issued and distributed in each region, so all vouchers would be acceptable across the country. This multi-level and multi-scalar organisation of the *Trueque* across the country worked for a while. The *CTs* informed the regional committees how many vouchers they had distributed that month (the agreed rule by then was 50 *créditos* per new entrant) and the meetings gave birth to a variety of ideas on empowerment and political emancipation.

Table 1. Organisation of Red de Trueque

Types of agent	Organisations where they participate	Level of operation	Type of relation
Regional representatives	Inter-zone committees	National	Impersonal ties
Coordinators	Regional committees	Regional	Weak personal ties
Prosumers	*Club de Trueque*	Local	Strong personal ties

Far from being enthusiastic about the organisational design that came out of these meetings, the three initiators regarded the structure as a burden and the "politicisation of the *Trueque*". The committees were for them unnecessarily bureaucratic bodies that delayed the expansion of the *Trueque* and blocked the implementation of decisions. They viewed the alleged democratisation of the *Trueque* as a false pretence to pursue a project burdened by committees, detached from the real needs of participants. The *Trueque* presented itself as a 'state within the state' in a political sense, and not just 'a market within the market' as they had conceived it. While the process fits the description of institutional innovation proposed by Moulaert and Nussbaumer (2005), the design of rules of action is nested in the critical power struggles outside the SSE initiatives. As noted by Bardhan (1998) the collective action needed for institutional innovation may be overwhelming and well beyond what innovation in the morality of solidarity and reciprocity can achieve.

The scheme took on a life of its own and transaction costs grew with scale, as predicted by Douglas North's (1990, 2005). Most traders did not know each other and the currency system became "vouchers that come from the organisers". That is to say, the currency was by then not only innominate but anonymous as well, like an institution of unknown origin. Trust was no longer transferred from old to new members and the training courses did not meet the goals. Newcomers were asked to sign a letter of agreement with the main principles of the *Trueque*, which was little more than an informative sheet outlining the values the organisation stood for. They were also required to attend a couple of training sessions in which the system was explained to them, but in reality this happened only sometimes and it was in the course of trading that they became acquainted with the system and the other participants. The kind of trading they were used to practicing was that of the regular market economy and quite contrary to the principles of solidarity that the *Trueque* stood for. Atomistic market exchange is disembedded from specific social relations and different from a system of reciprocity (Granovetter, 1992). Institutional innovation, ascribed to SSE initiatives by Moulaert and Nussbaumer (2005), was gradually abandoned and replaced by institutional adoption, in this case of the rules of action that guided behaviour in the regular economy.

The initiators assumed that all newcomers shared the values of solidarity of the *Trueque* or would grow into them as they participated in the scheme. They thought that, while the bonds of personal exchange had long been overpowered, the new participants would be committed to the shared morality of the SSE. 'They signed the letter when they joined. This is a system of trust. Once in, we could assume they shared the values of solidarity,' said Covas. The expectation that there would be no shirking by participants was, to say the least, idealistic. Trust could not be transferred by interpersonal bonds as described by Uzzi (1996) because the number of participants was too large and this mechanism was no longer realistic or effective. Moreover, as more participants joined in, the 'common principles' were increasingly being perceived as the principles of the initiators, who were basically the strangers who had started the system. Ironically, the initiators, who had shown extraordinary creativity and ingenuity in launching the *Trueque*, organising it as a network and designing a device to replicate it as fast as demand required, eventually failed to keep pace with the changes in their masterwork. The *CTs* got out of control long before the leaders realised something had to be done. The question still remains as to whether remedial steps could have been taken.

There was a serious struggle for power to resolve between the supporters of the initiators and those against them. The opponents thought that the three initiators were trying to control the *Trueque* top-down and had become a straightjacket that constrained people's desires for democratic participation. The opponents believed that the *Trueque* belonged to all participants and should be managed horizontally by all of them. The more agents interacted with each other, the more struggles and antipathies were aggravated. The antagonistic relationships between the various leaders eventually broke the multi-level and multi-scalar organisation of the *Trueque* and the control mechanisms were abandoned. Officially, the articulated network broke up in April 2001, though the initiators had not attended any meetings since October 2000. The *Trueque*, understood as one national network linking regional and interdependent *CT*s, ceased to exist. There were too many opinions or visions about what the *Trueque* should be: a complement, an alternative or an improved capitalist economy; a new kind of informal economy, a desperate survival strategy, an economy of reciprocity and solidarity; a means to learn participation and democracy or a market by and for the poor abandoned by the state to fend for themselves; an environmentally friendly local initiative; a women-dominated economy.

Conclusions

The challenge for SSE initiatives to scale up starts already before it is launched, with the question on whether scaling up belongs in the views of the organisers. In the case of the *Trueque*, it was part of the discourse from the very beginning and structured agents whose preferences favoured growth as well. This is a first critical condition for any discussion on scaling up, as noted by Peter North (2005).

The challenge after that is to design institutions to resolve the trade-off between growth and the uncertainties of including larger numbers. The trade-off was synthesised according to Douglas North's categorisation of personal exchange, which is typical of small-scale economies like the SSE, and impersonal exchange, which is prevalent in larger economies. Personal exchange takes place in an environment of relatively transparent information flows, trust among participants and a shared morality to satisfy collective needs with social justice, but offers limited possibilities of diversification and gain from specialisation. Impersonal exchange allows division of labour and growth but at the same time increases uncertainty and the costs of managing the system. In theory, scaling up requires the collective creation of formal and informal institutions as part of a social innovation process. In its early days the *Trueque* was regulated by personal exchange and comprised a handful of participants of more or less similar social background. After that, the number of coordinators grew to several dozens and the number of participants to thousands. Transaction costs soared, because exchange was between strangers and there was no state regulation. With the expansion of the *Trueque*, diversity grew and with it personal rivalries, power struggles, and divergent interests and intentions. In the longer run these could not be solved and collapsed the system.

The scaling-up sequence of the *Trueque* can be summarised as follows. In a first instance, the conditions of personal exchange prevailed and guided the actions of a small number of participants that trusted each other. The initiators considered that this small scale, typical of SSE initiatives, was a limitation to access resources and achieve a satisfactory economic impact at the level of the households. They decided to concentrate their time and efforts to scale up the scheme and replicate it in other localities.

In a second instance, they achieved the replication of the scheme in other localities through their personal network of contacts, on which they had a high level of reciprocal trust. New *CTs* would launch their own means of payment, automatically adhere to the principles of solidarity and transfer bonds of reciprocity to their own networks of local participants. Crossing the boundaries of locality did not pose a problem as long as the interpersonal network expanded trust to include newcomers and the shared morality was sustained. This first step of scaling up worked reasonably well and followed the mechanism of transfer of interpersonal trust that Uzzi found in his research (1996). It allowed participants to move freely from one CT to another, access more resources and generally enjoy greater economic impact. The transfer of interpersonal trust kept transaction costs under control and adherence to the principles of solidarity was apparently acceptable.

The implicit adherence allowed the organisers to venture in a third instance, characterised by the creation of the first institutions of impersonal exchange by negotiation and agreement among leaders. The interpersonal transfer of trust, described by Uzzi (1996), had reached its limits but it was enough to keep actors working together towards institutional innovation. They could define rules for voucher issuance and incorporation of new members, and standardised the regulation of a *CT*. Rules of action were enforced by reciprocal control among the participants. The initiators were no longer directly known to everyone but their reputation was. A point to add to Uzzi (1996)'s findings is the role of the initiators' reputation. In the weaving of an interpersonal network of networks there are referents on which more trust is placed than on others and they act as the linchpin of the system. This explains why the original vouchers were preferred to the subsequent generations of local vouchers, even if they were equally without legal protection or financial reserve.

A fourth stage in scaling up into the institutions of impersonal exchange was the organisation of a multi-level and multi-scalar structure of governance across the country. This was meant to work as an apparatus of rules and institutions to regulate and coordinate economic action among thousands of participants. The institutions of impersonal exchange resulted from negotiations and agreements, which were binding but in no way could be controlled. Enforcement relied on voluntaristic assumptions and individual adherence to the SSE morality of the scheme. This mechanism allowed the participants to enjoy the benefits of a more diverse and richer local economy and a wider economic impact on their income. While it allowed the *Trueque* to scale up further, it proved not to be sustainable in the long run because SSE initiatives lack formal control mechanisms like those of the state.

The experience of the *Trueque* in Argentina shows that there is potential for SSE initiatives to scale up from personal to impersonal exchange, benefit from a larger economy and yet not lose the morality of the social and solidarity economy. However, there are limits to how large SSE initiative can become. The process of scaling up combines institutional innovation within the scheme (new rules of action) with the extension of the shared morality for the satisfaction of collective needs to the new comers. This corresponds to the third stage just described in the evolution of *Trueque.* Three processes combined in that stage: 1) the extension of a morality of solidarity and reciprocity from old participants to newcomers was still possible, 2) the reputation of the leaders acted as the linchpin that sustained trust and glued the system, even if trust among the participants was not necessarily high, and 3) institutional innovation was on-going in processes of negotiation and agreement between the leaders and resulted in clear rules of action for the whole network. When any of these three necessary conditions is absent or becomes exhausted, the institutions created by the SSE can no longer guide the social action of participants. The initiative cannot expand further and may even contract.

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