UNDERSTANDING THE RECENT DYNAMICS OF LOCAL CURRENCY INITIATIVES IN SWITZERLAND

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ABSTRACT

This paper investigates the recent local currency initiatives in Switzerland. These currencies are considered by their founders as a tool for a necessary socioecological transition. The study mobilizes the concept of grassroots social innovation and considers alternative currency clusters as a niche within the multi-level perspective of sustainability transitions. To challenge the dominant monetary regime, a local currency niche must acquire a certain strength which can be expressed in diffusion dynamics of four types: replication, scaling up, translation and innovative scope. A framework of these niche dynamics is used to analyze the emergence and diffusion of eight associative local currency schemes. Data for this multiple case study were collected via interviews, documentation and observation. Results show that the local currencies in Switzerland were created independently by small groups of people active in the ecological transition movement and the social and solidarity economy. Founders exchange among each other in a loose network, and more experienced actors support new projects with practical advice. In terms of business members and regular individual users, the currency associations have difficulties to reach a critical mass. What is more, support from public entities and more established actors is rather lukewarm. Despite collective efforts and a lot of enthusiasm, the influence of the currency niche remains therefore limited.

KEYWORDS

Local currency, complementary currency, grassroots innovation, diffusion, socioecological transition, Switzerland.

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1. INTRODUCTION

In the last few years, several associative local currencies have been created in Switzerland. While these initiatives take different forms, they all share the vision of a more localized and sustainable economy and view local currencies as a tool for a socio-ecological transition. The founders are critical towards different aspects of the dominant monetary system, which they seek to transform. Overall, these monetary schemes can be designated as transition currencies, a term associated with local currencies in the United Kingdom (North 2010a; Ryan-Collins 2011).

The somewhat unexpected appearance of these local currencies in a relatively short time frame and in different parts of the country leads to several questions: How did the initiatives of new local currencies emerge? To what extent did actors of different initiatives exchange and learn from each other? And what are the diffusion dynamics of these local currencies?

To address these questions, we conceptualize local currencies as grassroots innovations, created by civil society actors as tools for advancing sustainable transitions (Seyfang and Smith 2007, Smith et al. 2016). According to different authors, the impact of these bottom-up initiatives is often limited (North 2014; Michel and Hudon 2015; Blanc and Fare 2018). Consequently, the questions of their viability and diffusion dynamic are of crucial importance (Hermans et al. 2016; van Lunenburg et al. 2020). Conceptualized within the multi-level perspective of sustainability transitions (Geels 2011), local currencies need to have a certain strength to influence a non-sustainable monetary regime. Building on the research of Seyfang and Longhurst on alternative currency clusters (2013a, 2016), we discuss different forms of diffusion - namely diffusion by replication, diffusion by growth, diffusion by institutional transformation and diffusion by scope enlargement - and we mobilize these forms to analyze the current state of the currency cluster. The overall aim of the paper is to present a framework to assess the strength of associative local currency clusters, to portray the local currency scene in Switzerland, and to analyze the possible formation of a sustainable grassroots innovation niche.

The paper proceeds as follows. We first lay out our analytical framework, mobilizing the concepts of grassroots innovations and of diffusion dynamics. We then introduce the case study design and methodology. After the presentation and a short comparison of the different local currency initiatives in Switzerland, we analyze their diffusion pathways, thereby deepening our understanding of the dynamics of this recent alternative currency movement.

2. LOCAL CURRENCIES AS GRASSROOTS INNOVATION NICHE

To analyze the emergence and dynamics of local currencies, it is fruitful to conceptualize them within the multilevel perspective on sustainability transitions. This section starts with some fundamental characteristics of associative local currencies. It then discusses the rationale of this form of grassroots innovation and explains how local currency initiatives are positioned at the niche level to challenge the dominant monetary regime.

Local currencies are designated as complementary or alternative currencies which circulate in a geographically restricted territory on a subnational level or, rarely, covering a binational region. Usually, local currencies are created as a tool to support the local economy and small businesses by reducing monetary "leakages" outside a designated region. As evidenced by a study of France, the size of the territory and population covered by a local currency system varies considerably (Blanc et al. 2020: 43). Small schemes comprise less than ten thousand potential users; large networks encompass over a million potential users. Most local currencies are convertible and paper-based. Some are also based on platforms which enable electronic payments, and a few exist only in electronic form.

Following Blanc (2018), and based on Polanyi's terms, the local currencies under study are a form of modern special purpose money. While some local currencies are introduced by local or regional government as they expect public benefits, they are most often launched by civil society actors and are designated by Blanc as a type of "fixed-value associative currency" (2018). The term associative refers to the issuer of the money which is neither a public entity, nor a commercial group, but a not-for-profit association. In another typology of complementary currencies, Blanc designates associative local currencies as "economic projects" guided by market exchange, in contrast to territorial projects (guided by redistribution) and social projects (guided by reciprocity) (2011). In practice, however, these currencies also present elements of reciprocity as shown by Degens (2016, 2018) and, with the involvement of subnational public entities, elements of redistribution.

Associative monetary initiatives can be qualified as grassroots social innovations, defined as "innovative networks of activists and organizations that lead bottom-up solutions for sustainable development; solutions that respond to the local situation and the interests and values of the communities involved" (Seyfang and Smith 2007: 585). Contrary to market-based innovations where the main driving force is profit, grassroots innovations' driving force is social need and alternative values. Its resource base is mainly volunteer work and different types of subsidies, rather than income from commercial activity (Seyfang and Smith 2007: 592). Seyfang and Smith mention farmers' markets, vegetable growing cooperatives and social recycling enterprises as examples of "grassroots innovations for sustainable development" (585). Other researched sectors are community energy production, co-housing, appropriate technology and community currencies (Hossain 2018; Smith et al. 2016).

Indeed, at the origin of associative local currencies are citizens' initiatives which frame themselves as being part of the socioecological transition movement and against neoliberal globalization. The purpose is to re-embed the economy into society and nature (Fare 2016: 11) by means of democratizing the economy and shrinking the societal metabolism. The main innovation lies in the creation of monetary alternatives and the democratization of money on a regional level. A regionalized economy is said to be more resilient to economic shocks and less energy intensive (North 2010b). Economic relocalization would also entail the deglobalization of negative environmental impacts and create more pressure to reduce destructive economic activities. Volunteer work and subsidies are the prevalent resources for local currency initiatives (Blanc and Fare 2018).

Within the multi-level perspective on sustainability transitions, monetary grassroots initiatives are also conceptualized as social niche innovations which demonstrate that alternatives to the dominant socio-technical regime are possible (Seyfang and Longhurst 2013a). The multi-level perspective on sustainability transitions conceptualizes interdependent dynamics of three societal levels (Geels 2011). Niche innovations are situated at the lowest level (Geels 2011: 26). The socio-technical regime is on the middle level and represents the dominant institutions in a selected societal sector such as agriculture, transportation, or money. Niche innovations potentially influence or even challenge the dominant regime. The third level is called socio-technical landscape. Regarding the other two levels, it presents an exogenous force made of demographic trends, dominant values, the material base, and macroeconomic patterns (Geels 2011: 28). Transitions are defined as "shifts from one regime to another" (Geels 2011: 26). Slow but profound changes in the landscape and shocks such as an economic depression put pressure on the regime level. Also, changes at the landscape level can open windows of opportunity at the niche level (Geels 2011: 29).

Regarding currency alternatives, the relevant dominant institution is the national monetary regime which can be criticized from a sustainability perspective on at least three points: Money creation is undemocratic (1), money creation promotes environmentally and socially harmful practices (2), money circulation also promotes these harmful practices (3). First, money creation is controlled by the central bank and by commercial banks where citizens have no say. Second, money is mainly created via credit by commercial banks. The only criteria for bank lending are the creditworthiness of the debtor and his capacity to pay back the debt. Third, the circulation of money is not subject to social or environmental norms. The high fungibility of the general-purpose national currency allows for harmful consumption and investment. Monetary grassroot initiatives challenge this regime by creating an ethical and "better" money (Thiel 2011a). With the development of monetary alternatives, they hope that other actors "will be influenced by the power of the example" (Geels 2011: 33) or that an external shock opens new spaces for these niche innovations to flourish.

3. NICHE BUILDING AND DIFFUSION OF LOCAL CURRENCIES

If associative local currency initiatives want to effectively weaken the dominant monetary regime, they must grow and institutionalize as a cluster.² This section presents the analytical tool to measure diffusion and scale dynamics of associative local currency niches. We start by briefly mentioning the issue of sustainability of past local currency clusters. We then discuss the different dimensions of scaling for grassroots innovations and how they can be applied to analyze the strength of these currency alternatives. For this purpose, we present the findings of Seyfang and Longhurst (2013a, 2016) and we expand on the three dimensions pointed out by the authors: replication, scaling up (growth) and translation. We then discuss and add innovative scope as a fourth dimension.

¹ For a complementary critic of the monetary system see Lietaer et al. (2012): Money and Sustainability: the Missing Link.

² This does not mean that currency experimentations do not have value on their own.

When one looks at historical dynamics of national local currency clusters, the typical story starts with emerging pioneers, sometimes creating a currency boom with a multiplication of initiatives. This stage is followed by a plateau where ceasing initiatives and new initiatives hold the balance. Finally, the number of initiatives declines and only some local currencies remain in circulation. For example, when Collom (2005: 1573) researched "all of the local currency systems using printed money in the US" in the aftermath of a currency boom which had started in the early nineties, he found only 17 active systems out of 82 initiatives. The same pattern was also observed in Germany. A boom started around 2005 (Thiel 2011b), but far fewer currencies were in circulation ten years later (Leinert 2016). These trajectories indicate a difficulty in maintaining dynamic currency clusters over time.

In their research, Seyfang and Longhurst identify and evaluate niche building and diffusion processes among four types of community currencies (2013a, 2016). To study the relation between niche activity and diffusion success, Seyfang and Longhurst selected twelve currency clusters (2016), four of which were local currency niches (German Regiogelder, UK transition currencies, French SOL, Brazilian community banks). Effective internal and external networking, the construction of shared visions and expectations, learning, as well as the emergence of national currency networks are crucial elements for the building of community currency niches. As for the measure of diffusion success and the potential influence on the regime level, the authors distinguish three dimensions: replication, the growth of projects in scale and the translation of niche ideas into mainstream settings (2013a: 883; 2016: 9-10).³ They generally found that niche activity is positively correlated with diffusion (replication, scaling-up, translation) but high niche activity is not a necessary condition for replication: "high levels of replication can occur without extensive niche activity and vice-versa" (2016: 14). Also, networking between individual initiatives was "most strongly linked to diffusion success" (19) and the sociopolitical context also influenced diffusion (20).

3.1 Replication

Replication is the first type of diffusion and corresponds to the number of local currency initiatives. More than 100 initiatives per national cluster is considered to be a very high replication rate by Seyfang and Longhurst (2016: 10). To measure and compare the success of replication, we think that the number of initiatives should be put in relation to the population size of the corresponding territory (the national level for example). The authors distinguish three modes of replication. Reactive replication is the independent building of new initiatives, proactive replication involves an intermediary actor such as a national body actively promoting new initiatives and managed replication requires the permission of a central accreditation body (2016: 15). As this third type is a more centralized model, its fit into the definition of grassroots innovations can be questioned. The relationship between niche activity and replication seems to depend on the type of community currency. In the case of local currencies, replication remained comparatively low, despite a relatively high level of niche activity. According to the authors, this is due to the higher complexity and the high networking requirements of local currency initiatives compared to other currency systems.

3.2 Up-scaling

The second type of diffusion is up-scaling. It relates to the growth and the size of the local currency niche. To measure the size of the niche, Seyfang and Longhurst counted the number of users for the largest-known individual initiative of each cluster (2016: 16). A user base over 1000 people was considered as very high. For local currency initiatives, other measures or a combination of measures might also be suitable: the number of participating businesses and the amount of circulating money. Again, we think that the measure of the size should be put in relation with the territory covered by the initiatives. And instead of only taking the largest initiative, the mean size of the cluster could be considered.

3.3 Translation

Translation is a third measure of diffusion. It occurs when elements and values of the grassroots innovation are adopted by new types of actors and by the incumbent regime (Seyfang and Longhurst 2016: 17; Boyer 2018: 34). While no clear measure for translation is proposed by Seyfang and Longhurst, only some translation seems to have occurred for one of the four local currencies (2016: 13, 17). The national monetary regime is regulated by the state. Therefore, our proposition to measure translation concentrates on the three administrative levels: national, regional, and municipal. On each of the three levels, translation in the form of governmental support can take

³ For different dimensions of "upscaling" and "outscaling" of grassroots innovations also see Hermans et al. (2016).

⁴ Only one of the local currency clusters had a currency with a user base higher than 1000 people (Seyfang and Longhurst 2016: 10,11).

different dimensions and depth. Building on the analysis of Blanc and Fare (2013) we propose the following dimensions for translation. First, as state has the monopoly of creating legal tender, there is the dimension of legal recognition at the national level. Associative local currencies can be illegal, tolerated, or legally recognized and supported. For example, the complementary currency WIR has legal recognition in Switzerland, as well as local currencies in France since 2014. Second, currency initiatives get financial support (Blanc and Fare 2013: 73): public subsidies for the organizational structure, for employees or the provision of office space. Third, local currencies are accepted as means of payment by public entities. This can take different forms and occur to different extents: the payment of various services, taxes, public transport tickets, electricity bills. And finally, alternative currencies are used as public policy tool (Blanc and Fare 2013: 74). Subsidizing the exchange of convertible local currency and utilizing local money for public procurement or social policies are different ways of bringing these currencies into circulation. The three latter dimensions refer essentially to the regional and local level.

3.4 Innovative scope

We propose innovative scope as a fourth diffusion pathway. Innovative scope refers to the combination of different services and the building of an alternative monetary and financial ecosystem. A broad panoply of services responds to different user needs and has a higher potential to challenge the dominant regime. Most associative local currencies start with a paper version. A first and obvious addition is the possibility of electronic payments which allows an easier transfer of higher amounts, notably between professional users. The lending of money would be another enlargement. Different types of credit are possible: mutual credit between individuals (LETS type) and between professionals like the Sardex initiative (Motta et al. 2017), the use of the collateral of convertible currencies or even "bank credit" as in the example of the WIR currency. These enlargements could also be achieved through collaboration with other initiatives, notably alternative banks.

These four proposed and refined dimensions will be used to deepen the analysis of the emergence and diffusion of a local currency niche. The recent emergence of local currency initiatives in France (Blanc et al. 2020), Belgium and Switzerland (Place et al. 2018) hasn't been studied within the grassroots innovation perspective. Among them, our choice falls on Switzerland which seems to be the least studied case. Its dynamic but still limited number of local currencies allow for a qualitative in-depth analysis of the emerging cluster.

4. METHODOLOGY

The research relies on a case study design which is considered as one of the five main qualitative research designs (Creswell and Poth 2018). As an "empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context" (Yin 2009: 18) a case study is particularly appropriate for analyzing the emergence and dynamics of associative local currencies. We consider the national currency cluster as an overarching case comprising single currency initiatives as subcases or as embedded cases. Our interest in the case is both intrinsic and instrumental (Stake 2000: 437). The case study is intrinsic in the sense that we aim to better understand this particular case; it is instrumental because we wish to gain general insight into the diffusion dynamics of alternative currencies. The case boundaries are set by including all local currencies circulating in Switzerland between 2010 and 2020 as well as one initiative whose currency has yet to be launched. This leads to eight subcases being part of the same national cluster (Table I). We did not include merchant and public initiatives such as the currency Abeille in La Chaux-de-Fonds which only aim for circulation from consumers to businesses. Finally, we did not include groups or individuals discussing the possibility of creating a local currency but who did not take a decision to start the development process. Active currency initiatives are present in the public sphere, with websites, on social media and to a lesser extent in traditional media. Therefore, it was not difficult to find all the subcases of the cluster.

Case studies build on different sources of information (Yin 2009: 99). We conducted interviews with the founders, we gathered documentation and we observed various events. These activities took place between September 2018 and July 2019. We conducted nine semi-structured interviews on site with at least one of the founders of all eight currency initiatives. Two interviews were conducted with two founders present. The interviews were conducted in French and German. As most initiatives were recent, all but two interviewed people still had a leading role in the currency association. We also spoke informally to other people active in the local currency scene and noted relevant insights. The interview questions covered the history and evolution of the currency, the initiators' motivations, the mechanism of the scheme and governance structure, human and financial resources, network activities and diffusion. The collected documentation from the currency associations comprised general

information for consumers and professionals, statutes, ethical charters, FAQ's, as well as lists of participating businesses. Most of this documentation was available on the websites of the currency associations. We also collected newspaper articles mentioning the researched currencies. As an observer, we assisted at general assemblies and informational events of different initiatives. We also took part in some association meetings and participated in two activities of local exchange points which were present at public events. Finally, we had the chance to assist at the launch event of the Épi, one of the local currencies.

To analyze the information, we employed two main analytical strategies. The first strategy consists in the development of a case description (Yin 2009: 131). The data obtained through document analysis allowed us to understand the history and functioning of the associations as well as the workings of the respective currency systems. The information served to establish the main characteristics of each local currency. Information from the interviews allowed us to complete this descriptive picture. The second strategy was to "follow the theoretical propositions that lead to your case study" (Yin 2009: 130). In our case, these are the concepts mobilized in our framework on grassroots innovation and diffusion dynamics of associative local currencies. Hence, the interviews were analyzed thematically with our predetermined categories (origin, rational for development, development process, networking, learning, replication, up-scaling, translation, innovative scope). Our participation at events of local currency associations provided excellent insights on everyday activities and challenges of the initiatives.

5. CHARACTERISTICS OF LOCAL CURRENCIES IN SWITZERLAND

At the time of our inquiry in 2019, five paper-based local currencies were in circulation in different regions of Switzerland (Table I). One of them, the Léman currency, was also present in neighbouring France. The Bonobo and the Farinet ended their circulation in mid-2018 and end of 2019 respectively. The Grue has been launched in 2020 and the Dragon has yet to be launched. Only the Netzbon has been in circulation before 2015. The time between the first ideas for a new currency and the launch event varied between one and five years. In the period considered (2010-2019), discussions on currency initiatives in other regions of Switzerland did not advance to formalized projects. The currencies are issued by associations and one cooperative; involvement by municipalities or other public entities is rather low.

Considering the relatively small Swiss population of 8.6 million residents, we can speak of a local currency boom. Table I shows the name, year of launch, region, type of region as well as the creation mechanism or type of backing for each currency. All currencies have a fixed exchange rate of 1 to 1 by the Swiss Franc and, except for the Eulachtaler, they are all backed with the Swiss Franc. If needed, businesses have the possibility to reconvert local money to Swiss Francs for a small fee. Apart from a larger presence in French-speaking Switzerland, no geographical or socio-economical pattern is visible. There are currencies in urban, rural and mixed areas.

Name	Period of circulation	Region	Type of region	Backing	
NetzBon	2005-	City of Basel	Urban	National currency	
Bonobo	2015-2018	City of Berne Urban		National currency	
Léman	2015-	Lemanic bassin Rather urban		National currency	
Eulachtaler	2016-	Winterthur and region Urban		Goods and services	
Farinet	2017-2019	Valais (french speaking part)	Mixed	National currency	
Épi	2018-	Gros de Vaud - Piéd du Jura Rural		National currency	
Grue	2020-	Gruyère, P. d'en H., S.land Rural		National currency	
Dragon	2021?	Canton of Fribourg	Mixed	(National currency)	

Table I: Geographical characteristics of local currencies

Table II shows more characteristics of each currency. The population size of the covered areas varies widely from 60 000 up to a million people. Without surprise, we observe that the number of participating businesses and

exchange points tend to grow with the population size. An exception is the Eulachtaler. Its few participating businesses also act as exchange points. The low number is notably due to its more demanding membership criteria. Finally, Table II also shows the approximate amount of money issued by the currency association.

Name	Population	Participating businesses	Population per business	Exchange points	Issued amount
NetzBon	190 000	135	1437	8	60 000
Bonobo	130 000	(30)	(4467)	1	15 000
Léman	1 million	409	2445	12	165 000
Eulachtaler	150 000	23	4826	23	?
Farinet	220 000	178	1461	8	187 000
Épi	60 000	53	1132	5	13 000
Grue	80 000	65	1231	10	30 000
Dragon	260 000	-	-	-	-

Table II: Economic characteristics of local currencies⁵

6. EMERGENCE OF THE CURRENCY INITIATIVES

This section presents the context, creation process and particularities of each local currency in the order of their creation.

The Netzbon from the city of Basel is by far the oldest local currency in Switzerland. It has its origin in a small cooperative which federates different organizations from the solidarity economy. At first, the currency was only used internally before it was opened to other organizations, businesses and individual users. At one point, there was also an attempt to combine the currency with elements of a time bank. Today, the operation of the currency is the main activity of the cooperative. The currency was launched during the local currency boom in Germany. But the main initiator, who had lived many years in Upstate New York, was also inspired by the currency experiments in the US, namely the Ithaca Hours. Thus, the Netzbon did not adopt the dominant "shrinking money" approach (demurrage) of the German "Regios" inspired by Rudolf Steiner and Silvio Gesell (Gelleri 2009).

The Eulachtaler was created by two people involved in the transition town group of the city of Winterthur. Disappointed from the slow creation of concrete transition projects, they founded an association which has the purpose to be an incubator for transition projects. One of the initiators has a long-standing interest in the topic of money which led to a first pilot project during an annual local market. The transition town movement aims at creating citizen initiatives which increase the resilience of communities in the light of the double threat of peak oil and global warming. Rob Hopkins, the founder of the transition movement and initiator of the local Totnes pound, promotes the creation of "transition currencies" as a tool to build more resilient neighborhoods. However, the initiators of the Eulachtaler didn't adopt the design of the transition currencies in England. Rather, they were inspired by the Lausitzer, a local currency in Germany. Unique among the local currencies in Switzerland, the Eulachtaler is backed by the promise of services and goods of the members, and not by an equivalent stock of the national currency.

The Bonobo originated within an anti-globalization group in the city of Bern. The main activity of the group is the organization of an annual thematic festival (Tour de Lorraine) as a counterpoint to the World Economic Forum in Davos (WEF). With the decision to choose finance and money as the festival theme, some had the idea to invent their own money, notably as a tool for popular education. To create the local currency, they founded an association

⁵ The numbers are from the second half of 2019, expect for the Bonobo (2017) and the Grue (2020 at launch date).

⁶ The Totnes Pound ended its circulation in 2019.

⁷ The Lausitzer does not seem to be still in circulation: http://lausitzer.net

separated from the festival organization. If the Bonobo was launched as a Festival money in 2015, the plan was to continue and widen its circulation after the event. However, the currency was not used much, and its circulation was ended in 2018.

The first local currency in French-speaking Switzerland was the Léman, circulating in the populous binational Lemanic Region. Discussions on creating an alternative currency started in 2010, after the financial crises and influenced by the growing local currency dynamic in France. The initiators organized many meetings and activities with dozens of participants active in the solidarity economy and the transition movement. Various experts participated to give their views on the issue. In 2013, Frédéric Bosqué, co-founder of the SOL-Violette in Toulouse was invited for two days to moderate the collective creation of an alternative currency. This inclusive process was supposed to lead to a consensus, but too different visions resulted in a blockage. Some people disengaged from the process and a small group went forward with the creation of a backed paper currency which was launched in 2015. Two years later, the association of the Léman also introduced an electronic version (e-Léman) and a mutual credit system (Lémanex) inspired by the Sardex in Italy and based on the blockchain technology.

The Farinet was conceived by a small group of people attending a training course on ecovillage design created by the association Gaia Education. Part of the formation was the development of a project proposal on a related topic; one of them was social currencies. The group came up with the idea of a local currency for the canton of Valais and some of the group members decided to put the project into practice. Other people joined and a crowdfunding campaign provided an initial funding for the design and the printing of the money. In a tourism region and with local tourist offices participating as exchange offices, the Farinet had a much-noticed start. Nevertheless, the founders considered that the currency did not circulate enough to reach their expectations. Less than three years after its launch they decided to end the circulation of the money.

The Épi currency is mainly the result of the determination of two socially active women in retirement age. They first got interested in monetary issues from the discussions surrounding the Swiss sovereign-money initiative. The citizens' initiative was submitted at the end of 2015 and was rejected by voters in 2018. But the trigger for their work on a local currency was the viewing of the highly popular French documentary "Tomorrow" (Demain 2015) which featured monetary alternatives such as the Swiss WIR bank and the Bristol pound. In a relatively short period, they designed the Épi for a small rural territory comprising villages up to a few thousand inhabitants.

As for the Épi, the documentary "Tomorrow" also presented the decisive call for action for the initiators of the Grue and the Dragon. The Grue is the only bilingual currency and has been launched in 2020. The aimed territory of the Dragon, which is not yet in circulation, slightly overlaps with the one of the Grue. The fact that both initiatives have about the same chronological starting point as the Épi shows that the time from the ideation to the launch of a currency varies considerably between initiatives. The main factors determining the length of the realization period seem to be the amount of time a group of initiators can put into the project and the degree of consensus between the group members on the characteristics of the currency to create.

7. NICHE BUILDING AND DIFFUSION DYNAMICS OF LOCAL CURRENCIES IN SWITZERLAND

7.1 Replication as growth in number

As explained above, replication is the growth in number of monetary schemes within a national or another given territory. The sharing of information, networking and the creation of a national association that promotes local currencies are at the source of replication. Consequently, this section analyses how the different initiatives are related.

During the creation process of a new currency, the founders took inspiration from the best-known local currencies, the Chiemgauer in Germany, the Bristol Pound, and, more recently, some of the rising currencies in France. Available books and guides on how to create a local currency were also consulted. The initiators from the Léman and the Farinet invited experts from France, Frédéric Bosqué and Philippe Derudder respectively, to give workshops on the essential steps of money creation. If the founders looked for information on an international level, they did not mention international associations or groups which promoted local currencies in Switzerland or gave advice on their creation.

Within Switzerland, we saw informal mentoring taking place from more established associations aimed at new initiatives. In the German-speaking part of Switzerland, the Eulachtaler and the Bonobo got advice from the founder of the Netzbon cooperative. In the French-speaking part, actors of new currency projects got relevant

information from more experienced members of other currencies. As a cross-border currency, the founders of the Léman also participate actively in the French local currency networks, notably the Mouvement Sol. The initiators of the Grue and Dragon, travelled together to Strasbourg to learn about Le Stück, the city's local currency. These network-building activities led to three national meetings among the currency initiatives in 2017 and 2018. One of the main reasons for the meetings was the pressure put on local currencies by the Swiss Financial Market Supervisory Authority (FINMA). We will come back to this issue in the section on translation. An attempt to organize a national meeting in 2019 did not materialize due to time constraints. There is also an initiative called Swiss Currency Confederation which aims to study and disseminate information on monetary pluralism in Switzerland, but which did not work with specific initiatives (Place et al. 2018).

In sum, we observe a network between local currency actors. However, the network is very loose and without a coordinator or a shared platform which could help to institutionalize regular meetings, build a common strategy or organize replication activities. The replication mode of local currencies can therefore best be described as independent, the term which we prefer to the term reactive coined by Seyfang and Longhurst (2016). They are independent initiatives whose founders often know each other and communicate on an irregular basis. Considering the relatively small size of the Swiss population, the five active local currencies in Switzerland would correspond to about 40 schemes in the UK or in France.

7.2 Replication of a common currency scheme

Another aspect of replication relates to the model and practices of the monetary schemes. Can we observe the emergence of a local currency model being replicated in Switzerland?

A first common point is that all but one of the currencies are backed by the Swiss franc. This is not very surprising. With a few exceptions, recent local currencies in other countries are also backed by the national currency (or the euro). The received amount of Swiss francs is deposited in an account of the Alternative Bank Switzerland, the main ethical bank in Switzerland, and remains untouched. The aim of this money creating mechanism is to build trust among the users of the currency. Members know that businesses holding local currency could be paid out if the association ceases the circulation of the currency (which happened with the Bonobo and the Farinet).

More interesting is the fact that no association adopted demurrage as a mechanism. The purpose of demurrage is to accelerate the circulation of money and to discourage its storage. Most of the German Regios were "shrinking" monies, the Stroud Pound in England had demurrage, as well as some currencies in France, notably the Sol-Violette and the Stück. Most of the initiators told me that they had discussed whether or not to adopt demurrage. They decided against it for two reasons, one pragmatic and the other based on ecological values. If some of them liked the idea of accelerated local money, they perceived that the mechanism was too complicated to explain and would discourage the use of local money. They thought that convincing people to change national money into local money was already enough of a challenge. In addition, they considered that the incentive to quickly spend money in order to avoid a penalty would send a wrong signal in ecological terms. According to initiators, demurrage tends to promote overconsumption and money should only be spent for goods and services which are needed.

Another characteristic shared by most associations is an ethical charter which presents the aims and values of the currency. Businesses who want formally to take part in the monetary network become members of the association, endorse the charter, and pledge for continued improvement regarding the objectives outlined in the charter. According to different initiators, the displayed values lead to a "self-excluding" mechanism and almost no membership request from businesses had to be declined.

Other similarities are observable regarding the creation of the physical support. First, organizers hold a design competition for the vouchers. A jury composed by prominent local figures then chooses the best design. At the same time, a crowdfunding campaign takes place to raise money for the printing of the money and the award for the designer. The crowdfunding campaign serves to "measure" community support for the new currency. The events surrounding the creation of the physical support also help to raise media attention and the interest of a broader public. First introduced by the association of the Farinet, these elements have been replicated by subsequent initiatives. With their crowdfunding campaign, the Farinet raised 25000 Swiss francs from 263 contributors, the Épi raised 15000 Swiss francs from 116 contributors and the Grue raised 26000 Swiss francs from 182 contributors. The association of the Dragon planned to organize a crowdfunding campaign as well. Likewise related to funding, most of the associations have in common that they rely on membership fees to finance their activities. We will further discuss financial aspects in the next section.

These different elements point towards the emergence of a common type and some shared practices among local currencies in Switzerland. But again, it is a rather uncoordinated diffusion where actors adopt practices which seem to work well among other initiatives.

7.3 Up-scaling

As mentioned above, the success of scaling up should be measured relative to the size of the population the currency is aimed at in terms of participating individuals and businesses, and in terms of the amount of money in circulation.

In all but one local currency in Switzerland, individuals can become a member of the currency association, but no membership is required for consumers who use the currency. In contrast, businesses who accept the currency are most often members of the association (see Table II). The Épi for example, has about twice as many business members as individual members. This shows that individual membership is quite low, and we do not know the number of people who pay with local money on a regular basis. Numbers from France show that there are only about three individual members for each participating business (Blanc et al. 2020). On average, businesses therefore don't have many customers paying with local currency. We got the same impression for Switzerland. It seems to be easier to convince businesses to accept local money than to get consumers using it on a regular basis.

Regarding the circulation of money, currency associations communicate the issued amount (Table II), but it is not possible to know how many of the converted notes are effectively in use. We assume that the circulating amount is lower than the issued amount. Nicely designed notes are often kept, even more so when they are sold in tourist offices as it was the case with the Farinet. This was an issue mentioned by the association of the Farinet when they decided to end the circulation of their currency (Farinet 2019). Compared to the amount of converted money, the initiators observed a relatively low circulation. A mechanism of demurrage (users must put adhesive stamps on notes on a regular basis to keep the value) or an electronic currency would allow to measure the amount in circulation. Only the Léman also has an electronic currency, but the e-Léman was not widely used at the time of our study.

We propose that a system can be considered as scaled up when more than one percent of the population is using it and when at least one business per 1000 inhabitants accepts the currency (10 individual users per participating business). For a currency covering a territory with 200 000 residents for example, this would correspond to 2000 active users and to 200 participating businesses. We should also introduce an under limit of participating businesses and users if the population covered by the currency is very small. The transition currency of Totnes, for example, comprised a population of only 8000 people (Ryan-Collins 2011: 64). Hence, the Totnes pound could be considered as scaled up with eight participating businesses and 80 individual users which would hardly be a scheme with a critical mass.⁸ Therefore, an under limit of 50 participating businesses might be appropriate. Furthermore, we also propose to consider the average number of participants of the whole cluster instead of considering only the largest system to measure the success of scaling up as it was proposed by Seyfang and Longhorst (2016: 10).

Of the three proposed measures to evaluate up-scaling, we only succeeded in obtaining solid numbers for the participating businesses. No scheme reaches the ratio of one business per 1000 inhabitants, but the currency that covers the smallest population comes close (1132 people per business for the Épi) (see table II). We observe that initiatives covering larger regions experience difficulties being equally present in all parts of the territory. Notably the Léman and the Farinet faced challenges to create local committees which could promote the currency beyond their initial centres. This points to the limited resources of the associations which would be necessary to scale up. Blanc and Fare distinguish three resource models for local currency associations: A model dominated by volunteer work; a model dominated by subsidies; and a model dominated by the activity (2017). Local currencies in Switzerland correspond to the first model. The work is accomplished by volunteers and the operating budgets are small and mainly based on membership fees. Relying on this source of revenue remains a fragile exercise. If the fees are high, businesses are reluctant to join the association or to renew their membership. For example, the Farinet lowered its membership fees and the Léman faced the problem of unpaid fees but did not want to exclude unpaying members. Some associations also encourage individual users to become a member and give them a

⁸ The circulation of the Totnes pound was ended in 2019.

rebate for the exchange of local money. This can foster the circulation of money, but the practice does not improve the financial situations of the association.

To sum up, the currency cluster in Switzerland cannot be considered as scaled up. This is in part due to the limited resources of the currency associations. Currency schemes aimed at a smaller population seem to be easier to scale up; the relocation of economic activities is more difficult for small territories though.

7.4 Translation

As outlined above, translation reflects the influence of the niche on the political and administrative level. Starting with the federal level, local currencies are not legally recognized in Switzerland, and it seems as if they had been treated the same as commercial gift cards. There was no political intervention in favour of local currencies, and no attempt was made to create a specific legal framework. In 2017, the Swiss Financial Market Supervisory Authority (FINMA) unexpectedly assessed local currency associations as financial intermediaries and subjected to the Anti-Money Laundering Act. As the financial cost of compliance was high, the currency associations tried to convince the FINMA that due to their small size and not for profit status, they should not be an object of surveillance. In return, FINMA threatened the currencies of closure and important fines. As a consequence, the Netzbon had to suspend the exchange of its currency (Oppliger 2018). But at the same time, the federal government introduced regulation to facilitate the market entry for Fintech companies. Ironically, local currencies can now comply with the FINMA requirements by conforming themselves to the Fintech "Sandbox" regulation which is made for cryptocurrency startups (FINMA 2019). We conclude that local currencies are merely tolerated on the federal level.

Public financial support was designated a second element of translation. Numerous parliamentary interventions on municipal and even cantonal levels asked for government participation in either one of the existing currencies or in the creation of a new currency. For example, the parliament of the canton of Neuchâtel asked its government to study the creation of a cantonal currency in 2018. Based on a commissioned report, the government decided against investing in such an endeavour (Conseil d'État 2019). The city of La-Chaux-de-Fonds also considered the creation of a local currency, but finally settled on the introduction of an electronic gift card called Abeille in 2019 (Conseil Communal 2019). None of the currency associations gets a sizeable financial support from the regional or municipal level which would allow them to have an employee. Some associations got sporadic small public contributions or awards. For example, the Léman won a sustainable development grant from the canton of Geneva in 2017. The Léman association also obtained some contracts from municipalities to evaluate the possibilities of strengthening local commercial circuits.

Another dimension of translation is the acceptance of local currencies as means of payment by public entities. We observed some acceptance among the currencies. The Léman is accepted by several towns in the canton of Geneva as means of payment for some fees and services and the Farinet was accepted by the city of Sion. Fines, entrance tickets and some fees could be paid in Farinet (Ville de Sion 2018). Tickets for the city theatre in Basel can be paid with Netzbons. The fact that several tourist offices acted as exchange points for the Farinet and the Grue also shows public acceptance. Having said this, local currencies are not accepted for significant payments such as municipal taxes, public transportation or electricity. Thus, there is no widespread acceptance of local currencies by public entities.

Finally, we did not witness the use of local money for any kind of public policy. No subsidies had been put in place to bring local money into circulation. But at the time of our research, the Léman association was in discussion with some public organizations to see if their year-end bonus could be given in Léman.

To sum up, local currencies cannot rely on a supportive environment at the federal level. In addition, local and regional entities are very reluctant to support local currencies beyond a mainly symbolic level. No institutional change towards a broader political support is visible. This means that diffusion by translation remains very limited.

7.5 Innovative Scope

Innovative scope is the fourth diffusion pathway of an associative local currency cluster. With the Léman and the Eulachtaler, two associations stand out with their effort to provide an enhanced monetary scheme. In contrast to

⁹ Municipalities and cantons have tax autonomy; local public transportation and electricity are provided by public entities.

most local currency initiatives in Europe, the Eulachtaler is not backed by the corresponding national currency. Its backing relies on the promise of goods and services by the business members. Participating businesses sign a contract with the association and receive a certain amount of local currency as a cash advance or credit margin. To bring the money into circulation, they can use the currency to buy goods and services of other members and they can exchange the currency with individual customers. This leads to a non-convertible currency which functions independently from the national currency. This corresponds better to the purpose of creating an alternative currency than convertible currencies. With 23 participating businesses, the currency is at an experimental stage. Since the association must sign a contract which each business member and members must trust each other, the scaling up of this type of currency is very demanding.

Regarding the Léman, it is the only local currency in Switzerland which also exists in an electronic form (e-Léman). This not only appeals to users and facilitates the exchange of money by notably allowing a monthly subscription for a certain amount of local currency, but it also facilitates the use of larger amounts by business members. In addition, the association has put in place a platform which enables participating businesses to provide credit amongst each other. Called Lémanex, this mutual credit system can be called a "LETS for business members" and is inspired by the Sardex scheme in Sardinia (Motta et al. 2017 Sardex). The credit margins are dependent on the size of the businesses. The Lémanex and the e-Leman are based on the blockchain technology which can potentially be shared with other local currencies (Com'Chain). The combination of local money and (local) mutual credit represents a more complete financial alternative. Finally, the association is also close to the social and solidarity economy network in the canton of Geneva (APRÈS-GE) and works to establish local circuits which fully function with local money. As the agricultural sector has the highest potential for a localized production and consumption cycle, the pinpointed products are beer, bread and vegetables (Rossiaud and Calderon 2019).

We did not observe other elements of innovative scope. The accumulated national money is not invested or offered as credit and no collaboration exists with other financial actors as for example the Alternative Bank Switzerland or the WIR currency to structure an alternative financial ecosystem. Overall, apart from the Léman association, the innovative scope of the cluster remains limited.

8. CONCLUSION

This article dealt with the topic of alternative currency niche development and investigated diffusion dynamics of the emergent associative local currency cluster in Switzerland. The description and comparison of all initiatives whose currencies have been launched in the last years foster our understanding of this previously unexplored currency scene.

The study adapted and expanded a framework to investigate the dynamics, strengths and weaknesses of national associative local currency niches in terms of their influence on the dominant monetary regime. The framework proposed to analyze the evolution of currency clusters along four types of diffusion: replication, growth in size, institutional transformation and innovative scope. Replication looks at the creation of new local currencies within a (national) territory. In Switzerland, this was not the result of a coordinated effort, but rather the consequence of small and independent groups willing to experiment in the creation of a local currency as a tool for fostering a more local and sustainable economy. We observed the building of a loose network where newcomers learned from more experienced initiators. This led to some common practices and features between different currencies (crowdfunding campaigns, no demurrage, ethical charter). At the same time, contextual factors and the burgeoning of sustainable transition initiatives encouraged grassroots initiatives in the complementary currency field. If replication was relatively important for the size of the territory, the other types of diffusion got mixed results. Regarding growth in size, currencies still lacked business participants and individual users to be considered as fully scaled up. Further, we concluded that institutional transformation, notably in the form of broad political support, has not occurred. Only a few municipalities supported a particular currency to some extent and the loose local currency network lacked resources to find a common answer to counter legal pressure. Finally, in terms of diffusion as innovative scope, one local currency stood out in creating complementary services, thereby trying to build an alternative financial ecosystem for businesses and consumers.

Our refined framework has proven fruitful for studying diffusion dynamics of associative local currency niches. It can be used to investigate other currency clusters and allows for comparison between clusters. Unfortunately, we

¹⁰ This money creation mechanism has been presented by Greco as a business-based community currency (Greco 2001: 213).

have not been able to assess the number of regular individual users of local currencies nor the amount of circulating money. These indicators are important to measure up-scaling. The trend towards electronic local currencies will facilitate these measures in the future. Back to the Swiss case, despite an impressive activity of currency creation, the influence of this grassroots niche remains limited. It looks as if the window of opportunity for niche diffusion, which opened in the wake of transition initiatives, the movie "Tomorrow" and the discussion on sovereign money, is slowly closing.

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