

Democratizing Money - Chiemgauer Community Currency as a collective designed money

Christian Gelleri

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Author: Christian Gelleri University of Wuerzburg <u>christian.gelleri@uni-wuerzburg.de</u>



How can the institutional design of money may be employed to strengthen selfdetermination, social cohesion and sustainability?

Example of the Chiemgauer Currency

Starting point is the example of the Chiemgauer that is located in the southeast of Germany between Munich and Salzburg. The Chiemgauer currency has begun as a school project in 2002 with six female students who wanted to experience an alternative form of money in a students projekt. Students (and teachers) should learn about what money is, what money does and what money can change with the help of a action-oriented pedagogic approach. For this purpose students, teachers and parents formed a non-profit organization in 2003 ('Chiemgauer e. V.') as issuer of the local currency. The non-profit-organization prints the money, do education and research work and look for members.

What are the objectives of the Chiemgauer Currency?

Main objectives of the Chiemgauer are regional development, promoting non-profits, increasing the share of 'gift money' and sustainability. In the case of output gaps and unemployment the local currency should work as a 'lifeboat'. Except for a small period in 2009 the last function wasn't necessary in the booming area of upper bavaria which belongs to the ten procent top regions in Europe¹. Some authors argue that the main purpose of parallel currencies are the anticyclic effects. They are right for underdeveloped regions and times of recession and depression², but there are also convincing arguments to establish complementary currencies in 'good times' to transform and enhance the economy to more sustainability, to more social justice, to more resilience and other reasons³.

¹ Kröhnert, Hoßmann and Klingholz 2008.

 $^{^{\}rm 2}$ Stodder and Lietaer 2016.

 $^{^{\}scriptscriptstyle 3}$ Lietaer 2012.

Where does the Chiemgauer idea comes from?

The Chiemgauer isn't a complete new idea. There were three important predecessors:

- First, the Bethel-Mark founded 1908 by Friedrich von Bodelschwingh at Bielefeld / Germany. The idea was to enhance the financial basis for a facility for handicapped persons. It was motivated by Protestant liberation theories. The objective was to motivate employees to buy self-produced products and services. It is the oldest existing complementary currency in Germany.
- Second were experiments in Germany and Austria with local currencies which were influenced by ideas of free money of Silvio Gesell. Most known is the 'miracle of Woergl'⁴ initiated by the mayor Michael Unterguggenberger 1932.
- Third is the WIR-bank in Switzerland which is the biggest complementary currency in the world⁵. It started 1934 as cooperative. The founders Werner Zimmermann and Paul Enz were inspired by free money experiments of WÄRA (Germany) and Wörgl but also by German and Skandinavian compensation funds which goes back to ideas of Pierre-Joseph Proudhon, Robert Owen, Adolf Damaschke and Karl Polanyi⁶. The basic idea is much older and is subject of research by anthropologists like David Graeber⁷.

All three examples show that money doesn't come into the world as a 'thing' or by 'individuals' but as a common aggreement of a collective⁸. The collective wants to solve a basic problem which Jevons called the problem of matching the double coincidence of wants⁹. The problem isn't solved by an anonymous market but by a souvereign which decides about the rules, the institutions and the processes of creating money¹⁰.

Where is the Chiemgauer located?

The Chiemgauer is situated in a region with the beautiful lake "Chiemsee" which give the region the name "Chiemgau". In the south are the alps as a border. The region is situated between Munich and Salzburg. About 200.000 people live in the "Chiemgau". Main villages and towns with Chiemgauer activity are Traunstein (21.000), Prien (11.000), Trostberg (11.000), Stephanskirchen (10.000), Siegsdorf (8.000), Übersee (5.000), Inzell (5.000), Obing (4.000), Frasdorf (3.000) and others. The Chiemgau is a traditional cultural region and is embedded within the two districts Traunstein and Rosenheim with about half a million people.

- ⁵ Dubois 2014.
- ⁶ Weber 2018, 138.
- 7 Graeber 2011.
- 8 Zelizer 1989.
- ⁹ Menger 2009/1892.
- $^{\rm 10}$ Desan 2017.

 $^{^4}$ Broer 2013.

Who issues the Chiemgauer?

The Chiemgauer-organization is located at Traunstein. Everybody who takes part is member of the Chiemgauer-organization. This basic-democratic approach is a core principle of the project. The members of the organization decide in a basic democratic process the bylaws and statutes. A board of execucitve is chosen every two years. Everybody who use the Chiemgauer has the right to get a vote for the assembly. Members with a vote pay a small annual membership due. The Chiemgauer organization possesses a limited company to organize the distribution of the Chiemgauer. The limited company is also democratically controlled by the members of the organization. In addition there is a data centre for local currencies organized as a cooperative (Regios eG) founded in 2007. The cooperative handles the transactions and accounting of the currency..

What are the basic rules of the Chiemgauer?

The Chiemgauer non-profit organization is obliged to fulfill the aims of the statutes and isn't allowed to make profits. Possible surplusses are expended for education, research and development of the Chiemgauer.

The assembly has decided the following basic rules¹¹:

- One Chiemgauer is calculated as one Euro. The relation can be changed in times of high inflation rates of the Euro.
- Businesses has to accept Chiemgauer 1 to 1 to the Euro, they can quote their bill amounts but have to give due notice.
- Consumers can exchange Euro into Chiemgauer 1 to 1, they can't change back Chiemgauer into Euro.
- Consumers determine a non-profit project which gets 3% of the inovoice amount in the Chiemgauer currency. Consumers don't have to pay the 3%.
- Businesses can change Chiemgauer back into Euro. There is a charge of 5% plus value added tax (at the time 19 % of the charge) for the exchange. 60% of the charge goes to the project the customer has chosen before. 40% are for expenses of the project. Businesses get an invoice for the 5% plus VAT, they can deduct the amount of tax chargeable and also the VAT tax.
- Businesses can also spend their Chiemgauer. All operating expenses can be deducted from income tax and all sales are taxable too. There is no difference in taxation between Euro and Chiemgauer.
- Non-profits get their promotion of 3% in Chiemgauer. They have to spend the Chiemgauer again within the Chiemgauer network. When non-profits have no other possibility they get 2% in Euro as alternative.
- The Chiemgauer has a negative interest rate of 6%. In the electronic version it is calculated daily (0,016% per day) but only from the 90th day. The first three months

¹¹ <u>https://www.chiemgauer.info/informieren/basisinfo-formulare/</u> (July 30th 2019)

are free. In the paper version of the Chiemgauer stickers are used to prolong the local currency. It costs 3% for half a year.

• The Chiemgauer is valid 3 years after issuance and has to be revalued 5 times with 3%. Effective dates are on July 1st and Jan. 1st.

When a new Chiemgauer series is printed the assembly approve it so the series itself is a component of the democratic decision process:



On the back side of the Chiemgauer is a reference on the statutes of the Chiemgauer organization. It is also a clear distinction that non-members has no legal demands against the Chiemgauer organization by owning a Chiemgauer.

When we study the printed design of the Chiemgauer we can find the basic rules imprinted and referenced to the statutes. It is an expression of the internal democratic structure of the local currency. Participants of the Chiemgauer describe themselves as equal fellows but with differences in knowledge and activity¹². It shows that the Chiemgauer isn't only a means of exchange or a neutral medium of communication but a context-sensitive and living collective convention¹³. Trust in the institution is crucial for the participants¹⁴. Building trust performs at different layers: The rule to bind the Chiemgauer on the Euro is the first layer. It helps to transmit the trust into the Euro system to the Chiemgauer system. Reports in media, personal relationships and cooperation with well-known institutions like banks and local authorities help to establish a solid ground of trust¹⁵.

¹² Thiel 2012, 200.

¹³ Thiel 2012, 82.

¹⁴ Hodgson 1988, 165.

¹⁵ Thiel 2012, 277.

Chiemgauer in practice

The structure is the framework wherin people can interact with each other and build more and more trust to each other.

The Chiemgauer circle begins with a loan in Chiemgauer or an exchange from Euro into Chiemgauer. More frequent is the exchange transition. In the beginning the waldorf school spread the word with the promise that 3% of every purchase go to the school. Students, parents and teachers were motivated to take part. Other projects followed and did the same. Every person who wants to use Chiemgauer has to registrate. The projects distribute the registration forms. After one weeks she or he gets the member card (Regiocard). The Regiocard is a plastic card with magnetic stripe feature. It only contains a membership number.

With the Regiocard you can pay directly at participating businesses. The payment procedure is like credit card payment with PIN-identification. The Chiemgauer software recognizes automatically if the user has a Chiemgauer account or an Euro account. Consumers normally have Euro accounts. With the payment the exchange from Euro to Chiemgauer happens automatically. The business gets Chiemgauer on the Chiemgauer account. With the payment procedure 3% of the amount is credited for the non-project chosen by the customer.

90% percent of businesses spend the Chiemgauer income again. When a business has to much Chiemgauer it can change back Chiemgauer into Euro. For 100 Chiemgauer a business gets 94,05 Euro. 3 Euro go to the project, 2 Euro are for operating expenses and 0.95 Euro are paid to the tax office (value added tax). The costs are the stimulus for acceptance locations not to change back. The better the logics of the system is understood the less are the costs.

The principle of the cash Chiemgauer is similar: You go to an issuing office and demand i. e. 100 Chiemgauer. The payment procedure is the same as the electronic payment. 100 Chiemgauer are typed into the card device, the user enters the PIN, 100 Chiemgauer are counted and handed out and the amount is withdrawn from the account of the user. The denominations of the Chiemgauer are 1, 2, 5, 10, 20 and 50 Chiemgauer.

The Chiemgauer software automatically withdraw Euro from consumers and Chiemgauer from other Chiemgauer businesses. In case of an exchange from Euro into Chiemgauer 3% of the amount is registered for the project. The user goes shopping with the 100 Chiemgauer. When the amount is 30,54 Euro the user can pay 30 Chiemgauer and 54 Cent in Euro or he can give 31 Chiemgauer and he gets back 46 Cent in Euro. It's also possible to pay 40 Chiemgauer and then he gets back 9 Chiemgauer and 46 Cent in Euro. The businesses handle Chiemgauer like Euro.

Businesses can deposit cash Chiemgauer on their Chiemgauer accounts. They only have to go to one of the 25 issuing offices to cash in the Chiemgauer amount. There are no costs for the Chiemgauer deposit. Only if Chiemgauer are exchanged back into Euro, the regional contribution rate is due. We can recognize a bonus-malus-system: 3% bonus for a project when you change Euro into the local currency and a handicap of 5% when you change Chiemgauer into Euro. This generates an attraction for the region. It could be called an areal attractor for the region.

Another important component of the Chiemgauer is the circulation incentive which is also discussed as theory of negative interest¹⁶. Cash Chiemgauer are only valid for half a year but you can prolong the period for another half a year when you buy a sticker which costs 3% of the nominal value of the Chiemgauer. If you have a 10-Chiemgauer-note which is valid through June 30th in August you buy a sticker for 30 Cent and stick it onto the note. Then you can spend the Chiemgauer until December 31st.

Businesses accept the Chiemgauer until the last day. If they have a Chiemgauer account they can deposit the Chiemgauer up to two weeks after expiry. The circulation incentive is applied on the Chiemgauer account too but only after the 90th day. The calculation of the negative interest rate is a quite complicated formula. For the technicians: It works with the first-in-first-out-principle. This pragmatic approach reduce the costs for the users while reaching the goal of a steady velocity of money. Chiemgauer turns around 10 times per year when you divide sales through the amount of Chiemgauer (turnover ratio). The problem of national currencies in the industrialized world is a decreasing velocity over time. When nothing happens a decreasing velocity leads into a recession and deflation. States and central banks are trying hard to prevent recessions but they don't take measures to increase velocity in the real economy. You can also say that the time relation is noch taken into account. When you consider the time component in the money design you don't have problems with a decreasing velocity anymore. No additional money printing is needed, no additional debts of states are necessary because the economy has a money system with a stable velocity.

The bigger picture: the Eurozone

The community is embedded in a bigger community, the region, the nation and the supranational order of Europe. We take a glance at the structure of the surrounding legal systems and the conditions under which a local currency like Chiemgauer can be operated.

The definition of the Chiemgauer as one Euro shows that the currency doesn't act in an empty space. The monetary system in Germany and the European Union have a design with a long historical path with many decisions on the way. The European Central bank sees the beginning of the Euro in the confirmation of the aim of a Economic and Monetary Union in 1988 and the order of the European Council to plan the steps of the Monetary Union¹⁷. The establishment of the European Monetary Institute (EMI) marked the start in 1994 for "step 2". A new exchange mechanism to bind national currencies to the common European unit was relaunched 1997 (ERM II). The Euro started as electronic currency on 1st Jan 1999 and the EMI renamed to European Central Bank. 11 countries fulfilled the conditions of the

 $^{^{\}rm 16}$ Kimball and Agarwal 2019; Grasselli and Lipton 2019.

¹⁷ <u>https://www.ecb.europa.eu/ecb/history/emu/html/index.en.html</u> (July 30th 2019)

Maastricht Treaty and the related legal documents¹⁸. A design series of the "Euro" was presented 1996 and officially launched on Jan 1st 2002. Only one year before the introduction of the Euro Greece was given green lights to take part also too. The decision process was tested before the courts many times but the European Court of Justice (ECJ) rejected the objections and in the main national courts followed the decisions.

In the treaty of the functioning of the European Union the Euro is defined as legal tender: "The European Central Bank shall have the exclusive right to authorise the issue of euro banknotes within the Union. The European Central Bank and the national central banks may issue such notes. The banknotes issued by the European Central Bank and the national central banks shall be the only such notes to have the status of legal tender within the Union."¹⁹

Not all countries of the European Union has delegated the souveranity on money issuance to the European Central Bank. Sweden, Denmark, Norway and some others are part of the European Union and issue their own national currency. They are not allowed to issue Euro of course. The countries who take part at the Euro zone have to accept additional rules for their country²⁰. Germany has accepted the rules and even have changed the basic law (Art. 88) to allow the transfer of the money policy to the European System of Central banks. The German central bank is part of the system and issues the Euro for Germany²¹.

Is the Chiemgauer "allowed"?

The Euro doesn't come out of nothing. Every country had laws for the national currency and the laws are in force to regulate the conditions of issuing legal tender and the operating of financial institutions who issue deposit money and e-money in Euro as unit-of-account or deal with money. But what about currencies with another unit of account? Some laws are an expression for the fight between the national state and local initiatives who tried to issue local barter system or local currencies²². The relationship between these old laws and modern local currencies and current virtual currencies are unsolved²³. But there are cases which give hints that barter systems and also local currencies are tolerated²⁴.

There is one case where a local paper currency was examined by a prosecutor and he decided not to accuse the issuers of the currency²⁵. The public prosecutor's office asked the German central bank for valuation and it answered with a reference on a study of the bundesbank

¹⁸ More on the legal framework: <u>https://www.ecb.europa.eu/ecb/legal/1341/1342/html/index.en.html</u> (July 30th 2019)

 $^{^{19}}$ Art. 128 of the CONSOLIDATED VERSION OF THE TREATY ON THE FUNCTIONING OF THE EUROPEAN UNION from

 $^{^{20}}$ Hahn and Häde 2010.

²¹ Art. 14 Bundesbankgesetz (law of the German central bank).

 $^{^{\}rm 22}$ Hardraht and Godschalk 2004.

 $^{^{\}rm 23}$ Hardraht and Godschalk 2004, Sademach 2012.

 $^{^{\}rm 24}$ Hardraht and Godschalk 2004, BGH 05.11.1998; Casper and Terlau 2018.

²⁵ §35 Bundesbankgesetz forbids to issue money beside legal tender. Roots for the ban go back to the 1930's. The case of the local currency "Dreyecker" began in 2006 und was closed in 2007 (internal documents).

that took the position that local currencies in Germany are limited in time and geographical extent. The author concluded that local currencies in Germany are too small to cause inflation and are no threat to the Euro²⁶. The central bank also gave a guideline for issuing vouchers. It is interesting that the central bank didn't demand the collection of the issued local currency. If it would have been a case of § 35 BbankG the central bank would have been obliged to withdraw the local currencies (§36 f. BBankG). The case showed that it depends strongly on the interpretation of the law by the central bank. It also shows how history changes: In the 1930's central banks in Germany, Austria and other countries actively pursued all trials to issue local currencies and barters systems. With the beginning of the new millenium central banks are apparently unwilling to apply the national laws on current projects.

Another development are directives of the European union which respond to the emergence of local currencies. The European Union defines exceptions from supervisory law like paper vouchers²⁷. There are also directives concerning vouchers²⁸. Authorities tend to see local currencies as "vouchers". There are court decisions which define only money as legal tender and make a clear distinction to private forms of exchange like bitcoin, local currencies and others²⁹. Conversely this means that local currencies are currently not under the supervision of banking authorities. This changes when currencies are dealt with Euro then laws of money market trading, money laundering and others have to be taken into consideration.

Recently the emergence of blockchain currencies has widen the discussion. The adoption of the laws on virtual currencies prove to be difficult and there are many discussions for more regulation on alternative currencies³⁰.

The Chiemgauer is not only embedded in a given economic and legal framework but we experience a living and transformative environment. Discussions have changed after the financial crisis and there is both openness and anxiety. Big challenges like the climate exchange and the deepening of social and regional inequalities create some openness for a new culture of communication between state and civil society to meet the key challenges of the century.

Collective Design of Money

Time after time individuals are inspired by ideas of monetary design and make proposals to their collective or their representatives. In former times it was seldom a democratic process but a decision by one or some powerful persons like a queen or king or moreoften a local ruler who organized a local market and money system. The creation process of money was often linked with religion in medieval and early modern times³¹. In Chiemgau money was issued by

 $^{^{\}rm 26}$ Rösl 2006.

 $^{^{27}}$ Council Directive (EU) 2015/2366 (Payment Service Directive II) corresponding to Zahlungsdiensteaufsichtsgesetz in Germany

²⁸ Council Directive (EU) 2006/112/EC supplemented by directive 2016/1065

²⁹ Kammergericht Berlin 25.09.2018.

³⁰ Read and Gräslund 2018.

³¹ Lietaer 2000.

the archbishop of Salzburg since the turn of the first millenium³². The domination ended only 1803. The issuance was mostly with divisional coins which represented more than the bullion value. That expressed the power of the ruler and the trust of the public in the stability of the coinage system.

With the beginning of the so called "modern time" banking systems evolved more and more. The money creation by banks is strongly intertwined with the state. It's like a "franchise system" where the state defines the basic rules and the conditions but delegates the issuing of bank money which is accepted as official currency³³. This system dominates today with a "market share" of nearly 100%. Desan shows how this form of collective design of money evolved in a hard-fought political process³⁴. With the upcoming of the financial crisis 2008 many people scrutinize the right of banks to create money out of nothing. It is a question of democratic legitimacy. It's not just about a value-stable money and the efficient operation of the financial system. It's about the objectives of a society and the contribution of the money system to their fulfillment.

The advantage of small alternative currencies are their limited risks in experimenting with the best design to fulfill the goals. The first step of each currency is to activate und participate people to define the common goals. A small currency can make this process more visible. The assembly of Chiemgauer and WIR have discussed a lot about goals and design of "their" currency³⁵. In Wörgl there was a parlamentary democratic system with a mayor and a city council which decided in an unanimous consent to introduce a local currency.

In the examples no user is excluded from the decision process which could be seen as crucial for a common good that everyone concerns. The democratic quality depends from constitutional aspects, in fact, societies engineer money rather than discover it.³⁶ It is an unusual perspective to look at money as a common good which has to be democratic. For the described complementary currencies the democratic decision process is a key for the understanding of these phenomens. This comes before the application of a monetary theory. Of course it's not always a conscious process of development and it may be that only a few persons are involved in the development of the core design but everybody has the potential to take part in the process if she or he wants.

The second common basis for all four examples of complementary currencies are the common needs and challenges of the involved people. This is the basis for the formulation of the objectives. The Bethel-initiative wanted to provide themselves with goods and services and avoid a dependance from external financial services and loans. Regions in Germany (Schwanenkirchen, Ulm, Erfurt), Austria (Woergl), Switzerland (Zurich, Basel) and many other regions in the world were deeply affected by output gaps and unemploment in the 1930s.

³² Archbishop Hartwig got the right by the German empereror Otto III. in 996 (Source: https://www.sn.at/wiki/Salzburger_M%C3%BCnze)

³³ Hockett and Omarova 2016; Craigher 2014, 107.

 $^{^{\}rm 34}$ Desan 2014.

³⁵ Dubois 2014.

³⁶ Desan 2017, 112.

In the beginning of the 21st century there was no depression scenario in the Chiemgau but there was also a perception of problems and challenges. At the micro level a waldorf school felt the lack of a sports hall. The students suffered under these circumstances and were delighted to see a way to make a contribution. They asked businesses and parents to take part at the complementary currency scheme and so the circle began. Here you can see money as a social relationship at its best³⁷.

The combination of a problem and a problem solving democratic process leads to a money design which combines the people to a more or less connected network with rules and institutions. The rules and institutions and also the effects can and should be subject to research³⁸. Economists concentrate on the effects and say: what works for the people ist good for democracy³⁹. I would add to this: the journey is the reward. If people in community currencies can experience basic democracy as a whole. Concentrating the money creation processes in oligocratic systems impoverishes a democracy.

Oligocratic and democratic ways of creating money

The history of money creating can be seen as a interplay between oligocratic and democratic processes. When we look on the proposal of Facebook and the Libra foundation we can find a globalized renewal of an oligocratic type of money.

The idea of the Libra goes back to Hayek's idea of a private currency which is covered by stable currency basket⁴⁰. It is comparable to the special drawing rights of the International Monetary Funds (IMF) which represents a currency basket of five national currencies (US-Dollar, Euro, Yen, Chinese Yuan, British pound and Swiss Frances). The Libra currency could have a similar basket but the Libra foundation intend to government bonds so they could earn additional interest. The disadvantage would be that in a case of a sell-off of the Libra currency there could be a shortage of liquidity at the Libra foundation. Owners of Libra could have a risk of loosing value. Another problem is that the interest is not given to the owners of the Libra currency but to the shareholders of the Libra foundation and that's two different things. You can only become a shareholder of the Libra foundation when you invest at least 10 millions of dollars. This hurdle is quite high and excludes more than 99% of humanity of being a shareholder. Facebook has announced that they aim to bring together 100 shareholders. The list of the companies is quite impressive and escpecially the names of Paypal, Mastercard and Visa show that the key players of globalized transactions have explained to be part of the coalition. Officially the companies are competitors but together they compete with the national currencies of the world. For bigger currency areas it should be no threat but for small countries with an inflation rate above five percent per year it would be one. There are not only countries like Venecuela or Zimbabwe with extreme high inflation rates but also countries like Kenia, Gana or Egypt. When you look at the function

 $^{^{\}rm 37}$ Ingham 1996.

 $^{^{38}}$ Bode 2004; Ziegler 2009; Thiel 2012.

 $^{^{39}}$ Jung and Sunde 2014.

⁴⁰ Hayek 1977/1990; Bofinger 1985; Hodgson 1988, 295-296.

of money as a store of value, many people and especially rich people will prefer a currency with an inflation rate well below two percent instead of five percent and more. The exchange from national currencies like the Kenian Shilling into Libra leads to an additional depreciation pressure for the weak currency. This could even increase the high inflation rate of the national currency. Some would win but many would loose. The power of a few will increase and stabilize.

From the perspective of someone who wants to stabilize his or her fortune there is nothing wrong and of course we can see trading optimization all over the world. That's the source of high frequency trade to stabilize and increase profits.

But we have too see absolutely clear that this has nothing to do with "democracy", with "sustainability", with "fairness" and in the long run also with "freedom" and "stability". Democracy is not the power for an oligocratic elite but the power for all people of a community. We can see the world as one community when we would be consequent but today we are used to see nations as souvereign communities. Within the nations we often have federal systems like in the US or in Europe. People are not divided by the amount of money in their purse but by the territorial borders. Within the borders there are rules which mostly express human rights, freedom, equality, solidarity and other values. When we look at the German basic law for example we find in the first two paragraphs of article 20 the following passage:

"(1) The Federal Republic of Germany is a democratic and social federal state. (2) All state authority is derived from the people. It shall be exercised by the people through elections and other votes and through specific legislative, executive and judicial bodies."

The principle of the "social state" is strongly linked to article 3 of the basic law: "(1) All persons shall be equal before the law. (2) Men and women shall have equal rights. The state shall promote the actual implementation of equal rights for women and men and take steps to eliminate disadvantages that now exist. (3) No person shall be favoured or disfavoured because of sex, parentage, race, language, homeland and origin, faith, or religious or political opinions. No person shall be disfavoured because of disability."

What happens when the German state allows currencies which serves only a few shareholders? We can only answer this question if we compare it to a democratic version. The problem is that the existing financial system in Europe and also in Germany is confronted with a drastic deepening of inequality in wealth. There may be banks like cooperatives and saving banks who have survived the financial crises without bigger damage but they don't have an impact on the distribution of wealth. Perhaps it should be ruled out by taxes but are there also ways of changing the money creation itself to decrease inequalities?

Results of Chiemgauer in practice

The Chiemgauer haven't changed the wealth distribution in the region. The currency is too small. But when you look at the flows of the local currency you can see some differences:

- The Chiemgauer has a stable velocity of money. It makes no sense to hold Chiemgauer too long because of the negative interest rates. About 10.000 Chiemgauer have to be paid per year to the Chiemgauer community.
- Cash balances are quite low. User of the Chiemgauer avoid to accumulate high balances.
- A low quantity of Chiemgauer is needed to obtain sales. The need for liquidity is synonymous to loans at a bank or at the central bank. About 100.000 Euro are needed to provide one workplace. Normally a loan of 90.000 Euro is necessary. Compared to a loan of 30.000 Chiemgauer generating sales of 100.000 Chiemgauer or one workplace. So Chiemgauer is like car sharing only a fraction of cars / loans are needed.
- Less loans means less interest but savers are also ready to save for zero percent interest rate.
- Instead of maximizing profit the Chiemgauer initiative maximize donations: 60% of exchange charges and the velocity fee is given to non-profits for education, environment protection, research, culture, sports or other community-promoting activities.
- Costs for participating businesses are at two percent of sales. About one percent are donated and flow back in form of Chiemgauer. One percent is for operating expenses. Wages and materials are spent in Chiemgauer. The two percent are not away for the businesses, they result in more sales that turn around four times in average.

A short Utopia of Money

Let's imagine a world of monies which are polycentric⁴¹ and fulfill both the need for one global unit of account and the needs of every region in the world. The solution could be the right for local authorities to spend money which is created before by a central bank⁴². It make money available for the regions and they can invest it for public infrastructure. The money is created out of nothing and is donated to the local authorities. The amount of money is guessed by the central bank and consider the production potential of the regions. The central bank continue with targeting inflation which shouldn't be too low. Experiences of central banks show that two percent could be alright.

There is a negative interest rate of 6% on the money⁴³. A small portion can be taken for operating costs. When too much money was given into circulation the central bank take the fees to reduce the amount of money. When differences in the economic development occur the central bank allows regions to issue local currencies. The central bank defines the limit and increases it until the capacities of the regions are fully engaged. Ecological limits are taken into account. Full utilization consider the limit of the capacities of the planet, provide all people willing to work with a workplace with living wages and promote equality, freedom and solidarity as defined in the basic laws.

 $^{^{\}rm 41}$ Ostrom 2015.

⁴² Wray 2016.

⁴³ Rogoff 2016.

Applied for the Eurozone it would mean that a region like Sardegna with an unemployment rate of 16% get at least 2 billion Euro (output gap of 20.000 Euro per unemployed person times 100.000 unemployed people) by the European Central bank for building public infrastructure. The regional government is also allowed a limit of one billion Euro to issue a local currency (that's less than 5% of the money supply of all inhabitants). The unit of account would be Euro but it would only be possible to use the local currency for paying taxes at the local government. This would build the trust in the region that everybody who has to pay taxes could redeem the local currency. This could be organized in cooperation with civil organizations like the Sardex community (which has to be constituted as non-profit or cooperative)⁴⁴.

A region like the Chiemgau would possibly have another limit because the unemployment rate is only 2% at the time. The central bank could allow a limit of 100 million Chiemgauer to promote aims like sustainability. The money issuance could be linked to climate protection.

These examples may show a thinking of both a pluralistic and integrated money world which consider global and regional requirements in a context of sustainability and social justice. In the discourse of complementary currencies there should be more caution who we serve with our practice. Further research will be necessary to find robust ways.

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