Analysis

Trust in money: hard, soft and idealistic factors in Euro, gold and German community currencies

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In this article, we want to prepare the grounds for a psychology of trust in money, trust being key to sustainable money systems. On the basis of an analysis of functional money characteristics, we constructed 12 scales for trust-related money aspects: liquidity, fungibility, stability, backing, credibility of the issuers, system security, image, manageability and idealistic aspects. In an online study ($N = 394$) comprising a sub-sample of 97 users of community currencies in Germany, we tested the scales for three currencies: Euro, gold and community currencies. We could confirm the hypothesis of a divide between a hard, economic factor and a soft factor of trust in money. In addition, we found a third, idealistic factor in community currencies. The three currencies significantly differed with regard to the 12 trust-related functional aspects and specific uses: Euro is preferred for purchase and investing and gold for storage and community currencies for donations. The discussion centres on the concept of trust applied to money.

Keywords: community currencies; Euro; money; money perception; trust

1. Introduction

Trust in money is a necessity for the functioning of any capitalistic economic system. Trust is needed in almost any economic exchange as well as in credit relations. Market participants need to rely on the willingness of all other market participants to produce and to sell – and to pay. A cascade of distrust leads to the stagnation of the entire credit system, as evidenced in the recent global financial crisis. In his 'General Theory', Keynes (1997) pointed out that a trust crisis in investors may be so severe that even the most radical cuts in interest rates would not lead to any relief.

As trust is a psychological phenomenon, trust in money is also a psychological phenomenon. However, Furnham and Argyle (1998) stated that money is one of the most neglected topics in the whole discipline of psychology (p.2). If psychologists are interested in money, they look at attitudes towards money, why and how people behave as they do towards and with money, as well as the effect of money on human relations (p.6). But if you look for the relationship between trust and money in the psychological literature, you will discover a relative void. PsycInfo (December 2010), for example, reveals 1,154 entries for 'money' and 3,350 for 'trust', but only three entries for 'money' and 'trust' together.

In this article, we want to prepare the grounds for a psychology of trust in money. Our point of departure will be an analysis of the functions and characteristics of money, such as liquidity or credibility of the issuer, that may be to some extent relevant to trust in a currency. One particular goal is the ability to distinguish different currencies with regard to their trust-related characteristics. To this end, we compare the Euro with gold and community currencies that are in use in Germany. Community currencies are types of regional money that seem heavily dependent on trust within a regional network. Some scholars consider community currencies as a role model for sustainable money systems (e.g. Lietaer, 2009).

2. Community currencies

The idea of community currencies as an alternative to money was developed by the German–Argentine salesman Silvio Gesell (1862–1930). Gesell postulated a maldistribution of money, since in a money-driven economy there is always a tendency to use money not only as a medium of exchange but also to store value. Gesell (1958) contrasted money to wares, he wrote: 'The possessor of wares is commanded by them, under threat of

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punishment, to seek the market, and the punishment is carried out by the wares themselves. The offer of a ware for sale depends, therefore, not upon the will of its possessor, but upon the ware itself' (p.223). Money, on the other hand, is under no such compulsion. Possessors of money can postpone their demand for wares; they are free to choose the time to buy and suffer no penalty for the delay. Instead, they can obtain a special advantage from their privilege of being able to withdraw from the market. According to Gesell, money owners can demand a tribute from goods producers because of their ability to prevent the exchange of goods by holding back money (Gesell, 1958, p.225).

In order to achieve a steadier flow of money within the economy, Gesell suggested designing money in such a way that it deliberately loses value according to a predetermined schedule of depreciation. The advantage of liquidity is supposed to be neutralized by a fee, the *demurrage* that puts money under the pressure of supply. This would create an incentive for holders of money to 'use it or lose it' in both good times and bad. Gesell proposed to accomplish this by requiring people to purchase stamps that would need to be affixed to paper currency periodically in order to maintain its full value. That is why this kind of money is called 'stamp scrip'. In his *General Theory* (1936), Keynes (1997) appreciated the ideas of Gesell to create artificial carrying-costs for money by requiring legal-tender currency to be periodically stamped at a prescribed cost in order to retain its quality as money. He explicitly mentions Gesell's demurrage as one possible institutional alternative to inflation (p.355).

A community currency means that members of a group empower themselves to create their own medium of exchange which they agree to use in paying for purchases made among themselves. The community currency circulates complementary to the official currency in a certain area. It does not replace or substitute the official currency but provides an alternative used in addition to it. The paper notes or bank deposits have their own unit of account and fulfil nearly all functions of money; they are, like a national currency, credit instruments. Therefore, they have some similarities to local exchange trading systems or mutual credit systems that organize the exchange of goods and services via personal accounts and also with Barter Clubs, which operate without the involvement of convertible currency, using only virtual units as a measure. Community currencies in Germany are typically provided with a demurrage of 8–12% per year. Nearly all of them are 'stamp scrip', using stamps for the validation of the bills. Initiators hope for a steadier and faster circulation resulting in a higher turnover and a strengthening of the local economy.

One of the first experiments with the so-called depreciating money took place in the small Bavarian town of Schwanenkirchen where hyperinflation had caused a credit crunch in 1923. Shortly after the start of the currency Wära, a coal mine that had been closed 3 years before could be reopened with the help of a loan in the new currency (Ottacher, 2007, p.31). The Wära not only revitalized Schwanenkirchen but kept circulating in the whole region as well as in more than 50 towns all over Germany. It served as a blueprint for the 'miracle of Wörgl', a small Austrian town that, by emitting work coupons, managed to realize many public projects and additional investments and reduced unemployment by 11–16% while the rest of the country suffered from an increase of 19% (p.61).

In the midst of depression, the American economist Irving Fisher wrote a article on *Stamp Scrip* (Fisher, 1933; cf. Champ, 2008). He argued that stamp scrip, bills with small stamps of 2–3% face value per quarter stuck on in order to maintain their value, could 'break the back of the depression' in the U.S. Fisher failed in his 1932 bid for a nationwide scrip issue that would have been declared legal tender. Nevertheless, hundreds of regional scrips went into circulation, with some local or regional successes. Starting in 1931, local currencies were emitted in more than 400 towns and communities. These experiments came to an abrupt end when President Roosevelt brought in the New Deal and abolished the use of all 'emergency currencies' (cf. Lietaer, 2001; Warner, 2010).

The oldest and largest of the current local currency system in the U.S. is the Ithaca Hours, a system that promotes local economic strength and community self-reliance in and around Ithaca, New York, a town of 30,000 people. As Ithaca Hours are backed by relationships, the print on every banknote reads: 'In Ithaca we trust'. Over 900 participants accept Ithaca Hours for goods and services. In addition, some local employers and employees have agreed to pay or receive wages in part in Ithaca Hours to further the goal of keeping money local (Ithacahours.org, 2010). In Japan, the government has sponsored the development of a number of community currency programmes at the local level that have been successful in stimulating general trust among participants by rewarding civic engagement and thus creating social capital (Richey, 2007). In Germany, more than 100 community currency initiatives are currently in existence, approximately 40 of which have started emitting money (cf. Rösl, 2008).

3. The psychology of money

In this chapter, we introduce some basics of the psychology of money, in particular with regard to the perception of money. The aspect of trust will be discussed in the next chapter.

The human relationship towards money is often very emotional and goes way beyond any rational relationship towards a means or an instrument. This emotional

attitude had already been observed by James Mill in the early nineteenth century, as Wärneryd (2008) explicated, and is confirmed by current psychological research (Tyszka and Przybyszewski, 2006). From a psychological point of view, the emotional aspect can be captured by assessing money-related motives and attitudes. To this end, different scales and tests have been developed, such as the Money Ethic Scale by Tang (1995) with its factors 'success', 'budget' and 'evil' or the Money Importance Scale by Mitchell and Mickel (1999). More recently, Baker and Hagedorn (2008) introduced the YTF. The name YTF is based on the combination of two other scales: Yamauchi and Templer's Money Attitude Scale and Furnham's Money Beliefs and Behaviour Scale. It consists of 40 items that build the four factors 'power-prestige', 'planning-saving', 'frugality-distrust' and 'anxiety'.

The emotional connotation of money underlines its general social character. Money represents social relations and, in being socially produced, it can even be regarded as a social relation in itself (Stookey, 2008, p.8). Doyle (1992) explicates the roles of money as a 'vehicle for human interaction, a kind of language that people, as individuals or as groups, use to communicate with one another, often about status, influence, and power' (p.648). The social character of money was clearly demonstrated in a remarkable study by Vohs et al. (2006) on the psychological consequences of the exposure to money. The results of nine experiments show money to bring about a self-sufficient orientation in which people prefer to be free of dependence and dependants. Reminders of money, relative to non-money reminders, led to reduced requests for help and reduced helpfulness towards others. Vohs et al. conclude: 'participants primed with money preferred to play alone, work alone, and put more physical distance between themselves and a new acquaintance' (p.1154).

Given the social character of money, we find several functions of money and related psychological valuations. For instance, when comparing the US dollar with the Polish Zloty, Tyszka and Przybyszewski (2006) discovered two different factors constituting the recognition of a currency: 'good money', that is, hard aspects such as purchasing power, and 'nice money', that is, soft aspects that carry emotion-based value. In their ethnographic study, Belk and Wallendorf (1990) found 'sacred meanings' of money that transcend the profane use of money as an economic means for the exchange of goods and services. This sacred meaning can be found, for instance, in donations to friends or charity purposes – represented in the idea of 'special money' by Zelizer (1989).

In his study on attitudes of members of Austrian mutual credits systems, Musil (2005, p.171 ff.) was able to confirm this functional multi-dimensionality of money. He discovered a systematic difference in peoples' views on the hard and soft features of their local medium of exchange. Social indicators were appreciated much more strongly than economic indicators. In contrast to the low, actual utility provided for individuals as well as for a region by mutual credit systems, the promotion of general factors such as regional identity seems to be much more important. Musil found: 'Members' attitudes toward their mutual credit circle is better than the experiences actually made' (p.171). The most important arguments for participation in such projects are of an idealistic nature. This does not come as a surprise, considering that the motives of the initiators are also predominantly idealistic and social: promotion of community and creativity in an interest-free economy.

Furnham and Argyle (1998) argued the same point: 'There exists no form of money which serves all such functions simultaneously' (p.22). Mieg (2001) claimed that money has at least two essential aspects or functions that may contradict one another: money as value and money as debt. If money is constituted through an inner value or is symbolized by it, as with the gold standard of the late nineteenth century, it seems reasonable to store it, particularly for future transactions. If, instead, money is issued in a debt relation, i.e. through a loan contract, the money holder acts wisely in quickly giving it away or paying it back. In this case, the function of exchange dominates. Both aspects do not exclude each other but cause different attitudes towards money, depending on the emphasis on one of the aspects (p.107 ff.).

Fantacci (2005, pp.45–55) discovered a co-existence of two forms of money (small and large coins), serving separate exchange circuits (local and long-distance) throughout Europe from the resumption of gold coinage in the thirteenth century to the establishment of the gold standard in the eighteenth century. Complementary currencies facilitated a balance between complementary exchange circuits. For small coins, the stability of their extrinsic value was more important than the stability of their intrinsic value. For large coins (traded as commodities), the intrinsic value was predominant. Fantacci hypothesizes that 'the difference of the behaviour of the two currencies was due to a difference in their function' (p.55).

Towards an operationalization of trust in money

In view of its social character, the use of money is embedded within a system of trust (Maital, 1982; Pixley, 2004). Following Fetchenhauer and Dunning (2009), we understand that trust is essentially linked to a situation 'when there is no guarantee that the trustee will respond benevolently' (p.264) and use the definition by Rousseau et al. (1998) who suggested that trust is best defined as 'a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or the behaviour of another' (p.395). Thus, with regard to money, we trust that we can

make use of money or a specific currency in the way we intend.

The general benefits of trust are manifold: Kramer (1999, p.182 f.) points out that trust plays a role in societal functioning and constitutes an important source of social capital within social systems. It decreases transaction costs by facilitating the exchange of a variety of assets. Presumptive trust can produce substantial increases in both individual and joined pay-offs. According to Oswald (2010), a great number of studies prove that trust in a partner reduces the risk of being exploited. Therefore, the choice of cooperative behaviour in a social dilemma situation becomes possible (p.16). An important feature of trust in general is the reduction of uncertainty in any social context. For Luhmann (1979), 'system trust' which can reduce complexity is built on impersonal and generalized media of communication. In the case of money, anyone who trusts in its stability assumes that the system as such is functioning (p.50).

In the following, we have defined trust in money through its functions in social systems. We are 'vulnerable' with regard to the fulfilment of these money functions. Backed by the scientific literature on money and currency systems (Coleman, 1990; Finn, 1992; Wiswede, 1994; Greco, 2001; Konstantinou et al., 2005; Christl, 2006; Mankiw, 2007), we can derive 12 functional aspects of money that may influence the displayed trust in it. These aspects may be divided into at least two subgroups, firstly, hard aspects of a pure economic character: liquidity, fungibility and stability, and secondly, soft aspects with more regard for the original trust facets of any social or technical system: backing, credibility of the issuers, system security, image and manageability. Finally, a third subgroup of idealistic aspects is postulated that might play a role, especially for the establishment and use of community currencies, reflecting the specific idea behind these systems and the multiple purposes they are designed for.

Table 1 provides definitions for the 12 trust-related functional aspects of money, their categorization as hard or soft and comments on community currencies. For instance, fungibility is defined in relation to money functions in economic theory. In general, at least three functions are attributed to money: (1) it is a commonly accepted (i.e. conventional) medium of exchange, (2) it serves as a store of value (3) and it serves as a standard of value, by being exchangeable into all other commodities (Mankiw, 2007). Fungibility describes the range of uses of an asset. Owing to their built-in demurrage, community currencies have a limited fungibility. Although they are less appropriate as a store of value, they are a better medium of exchange in a real-world economy.

Modern money is fiat money, e.g. it is man-made and represents a claim to a certain part of the social product. Its value does not derive from a material such as gold but is regulated by administrative rules, for example, the control of the money supply. Modern money seems to be backed only by 'good faith' in the government and

Table 1 Trust-related functional aspects of money

Trust-related aspect	Definition/remark	Hard/soft aspect	The case of community currencies
Liquidity	Ability of a currency to be exchanged	Hard (economic)	Limited within a regional network
Fungibility	Range of possible uses of a currency (medium of exchange; store of value; standard of value etc.)	Hard (economic)	Enhanced exchange function; reduced storage function
Stability	Low inflation rate (depending on the relation of the amount of money and of the available amount of goods and services in an economic area)	Hard (economic)	Controlled 'inflation' (demurrage)
Backing	Until 1971 gold standard, today backing regulated by law	Soft	Backing by regional economic performance and currency acceptance
Credibility of the issuer	The state and the banks	Soft	Personal trust comes into play
System security	Protection against forgery and economic crises	Soft	Less prone to forgery; anti-cyclic character in times of crisis
Image	(Positive) emotional attitude towards a currency	Soft	Importance of the 'look' of the currency
Manageability	Low transaction costs	Soft	Higher transaction costs, e.g. using stamps (partly intended)
Idealistic	Linked to the 'sacred' meaning of money (Belk and Wallendorf, 1990)	Idealistic	Examples: advancement of ecology; enhancement of justice; promotion of the region; enjoyment

the credulity of all of the citizens (Finn, 1992, p.658; 'debt money', cf. Mieg, 2001). Therefore, soft aspects such as backing, the credibility of the issuer or system security come into play. By issuing regional or communal money that is based on a limited number of participants, a currency loses its anonymous character and brings personal trust to the foreground again. According to Coleman (1990) 'a close community among potential trustors leads to greater trustworthiness' (p.190). Ultimately, the value of any currency is determined by the belief that people have in the issuer's promise.

Finally, the image of a currency is of great importance, often based on the emotional attitude towards it (cf. Tyszka and Przybyszewski, 2006). In community currencies, an emotional relationship is caused by personal involvement in establishing and maintaining the regional currency system. It comes as no surprise that the general experience of managers of community currency projects in Germany is that users tend to pay more attention to the design and security features of paper bills than to the system behind the currency (Wonneberger, 2009). Table 1 also shows a set of additional trust-related functional aspects that come into play in community currencies – idealistic aspects. We can speculate that they are connected to the 'sacred' function of money (Belk and Wallendorf, 1990).

4. Hypotheses

Hypothesis 1: There are at least two trust-related factors in the perception of money, a hard factor that is linked to economic money characteristics (liquidity, fungibility, stability) and a soft factor that is linked to non-quantifiable characteristics such as image, credibility of the issuer or system security (H1.1). In the case of community currencies, we expect a third, idealistic factor (H1.2). In any case, we expect the soft factor to have a closer correlation to general trust in a currency than the hard factor (H1.3).

Hypothesis 2: Currencies differ with regard to trust-related scales (H2.1). We expect liquidity to be highest for the Euro, stability for gold and credibility of the issuer for community currencies. Furthermore, currencies differ with regard to usage (H2.2). We expect in particular the Euro to be used for investment, gold for storage and community currencies for donation.

5. Method

Data generation was conducted via an online questionnaire, using the online platform *unipark*. We contacted both users and non-users of community currencies in Germany.

We constructed eight 7-point rating scales for Euro, gold and community currencies: liquidity, fungibility, stability, backing, credibility of the issuers, security of the currency system, image and manageability. In addition, we defined four idealistic scales for community currencies: advancement of ecology, enhancement of justice, promotion of the region and enjoyment through the use of the currency. Furthermore, we constructed a general trust scale for each of the three currencies. All scales consisted of three to five items, with similar wordings for each currency. Here is an example for liquidity: 'The Euro is accepted everywhere and by everybody', 'Gold is accepted everywhere and by everybody' and 'The *Regio* is accepted everywhere and by everybody in the region'. For a list of all items for community currencies in English and German see the appendix.

Items for all trust-related scales and usages of Euro and gold were provided to both users and non-users of community currencies. Items for community currencies were only provided to users of community currencies. We distinguished between four currency uses: purchase, investment, storage and donation. Usages were assessed using single 7-point rating items. In addition, a German version of the YTF scale by Baker and Hagedorn (2008) was presented to all participants.

In total, 88 community currencies projects were contacted, resulting in the cooperation of 34 of them, often only represented by one or a few persons. Approximately 40% of the participants who started completing the questionnaire completed it fully. The final sample consisted of $N = 394$ German-speaking adults; 24.7% were users ($N = 97$) and 75.4% were non-users ($N = 297$) of community currencies. There were no significant differences between the users and non-users on the YTF scale or on the total scale or on any of the four sub-scales. The mean age of the participants was 36.8 years with a range of 18–96 years. The sample consisted of slightly more males ($N = 229$, 58%) than females ($N = 165$, 42%). The median of the educational degree was 'university degree'. Income showed a median of 1,500 Euro per month (net equivalence income), considerably lower than the German average. The place of residence was mostly the Berlin city region and Southern Germany – mirroring the distribution of community currencies in Germany.

Hypotheses tests were conducted in three steps, starting with an analysis of the sample of non-users, followed by the sample of users of community currencies and finally the total sample. Questions concerning community currencies could only be analysed on the basis of the user sample. Statistical data analysis was conducted using SPSS 17.0.

6. Results

Reliabilities (Cronbach's α) for all 12 scales plus general trust were quite acceptable, the mean reliability of the scales being 0.78.

Hypothesis H1.1: We conducted a factor analysis (method: principal component analysis). We found a divide between hard and soft factors for Euro and community currencies but not for gold. In the case of gold, only one principal component could be extracted. As an example, Table 2 shows the results for the factor analysis of the trust-related scales for Euro and gold on the basis of the total sample ($N = 394$, KMO = 0.881). For the Euro, we found a hard and a soft factor. However, not stability but manageability contributed to the hard factor.

Hypothesis H1.2: Table 3 shows the results of a factor analysis on the basis of the users of community currencies ($N = 97$, KMO = 0.875). We found three factors, this time the hard factor being constituted by liquidity, fungibility and stability. As expected, we found a third, idealistic factor. Unexpectedly, the image of community currencies had its highest load in the idealistic factor and contributed less to the soft factor.

Hypothesis H1.3: As Tables 2 and 3 show, all factors significantly correlated to general trust in the involved currencies. As expected, the correlations for the soft factor were clearly higher ($r > 0.54$) than those of the hard factor ($r < 0.37$).

Hypothesis H2: Table 4 displays the valuation of the three currencies by the users of community currencies. General trust is highest for community currencies. Euro, gold and community currencies significantly differ regarding general trust, trust-related scales and usages.

Hypothesis H2.1: As expected, liquidity is highest for the Euro and credibility for the issuer of community currencies. In contrast to what we expected, community currencies are rated best regarding stability – better than gold.

Hypothesis H2.2: As to uses, data support our Hypothesis H2.2: the Euro is preferred for investment, gold for storage and community currencies for donations. In addition, the Euro is preferred as a means of purchase.

The pattern of results resembles the one in Table 4, when we compare Euro and gold in the sample of the non-users of community currencies. All comparisons are significant at a 1% level, except for backing, credibility and donation. Table 4 also shows the cases where the users of community currencies and non-users differ significantly (on a 1% level). This affects the Euro only. For instance, general trust in the Euro is higher for the non-users than for the users of community currencies. The differences generally concern soft aspects such as credibility. The Euro soft factor (cf. Table 2) is significantly lower in users than non-users ($t = -5.261$, df = 390, $p < 0.01$), whereas no such differences can be found for the Euro hard factor. This factor is even slightly *higher* in users of community currencies than in non-users ($m = 0.21$ vs. −0.07).

Table 2 Factor analysis (principal component analysis) for Euro and gold after varimax rotation ($N = 394$)

	Euro hard factor	Euro soft factor	Gold factor	Communality
Euro: Liquidity	*0.696*	0.147	0.108	0.517
Euro: Fungibility	*0.711*	0.325	0.053	0.614
Euro: Stability	0.075	*0.834*	0.126	0.717
Euro: Backing	0.265	*0.760*	0.132	0.666
Euro: Credibility	0.171	*0.832*	0.064	0.726
Euro: Security	0.276	*0.727*	0.098	0.615
Euro: Image	0.394	*0.608*	0.167	0.552
Euro: Manageability	*0.721*	0.198	0.144	0.580
Gold: Liquidity	−0.072	0.071	*0.753*	0.577
Gold: Fungibility	0.228	0.068	*0.718*	0.572
Gold: Stability	0.052	0.263	*0.743*	0.624
Gold: Backing	0.259	0.148	*0.627*	0.482
Gold: Credibility	−0.003	*0.602*	0.421	0.540
Gold: Security	0.194	0.347	0.413	0.328
Gold: Image	0.357	0.008	*0.693*	0.608
Gold: Manageability	−0.075	0.126	*0.671*	0.471
Correlation with general trust in the Euro or gold, respectively	0.314**	0.734**	0.649**	

Note: KMO = 0.881, 57.4% explained variance.
**$p < 0.01$ (one tailed).

Table 3 Factor analysis (principal component analysis) for community currencies after varimax rotation (users only, N = 97)

	Hard factor	Soft factor	Idealistic factor	Communality
Liquidity	*0.666*	0.129	0.347	0.581
Fungibility	*0.772*	0.025	0.338	0.711
Stability	*0.621*	0.349	0.023	0.508
Backing	0.404	*0.555*	0.134	0.489
Credibility	−0.047	*0.799*	0.276	0.717
Security	0.178	*0.704*	0.247	0.588
Image	0.320	0.483	*0.571*	0.662
Manageability	0.203	*0.690*	0.195	0.556
Ecology	0.161	0.213	*0.867*	0.823
Justice	0.125	0.213	*0.879*	0.834
Region	0.259	0.310	*0.738*	0.708
Enjoyment	0.331	0.217	*0.732*	0.692
Correlation with general trust in community currencies	0.249**	0.549**	0.363**	

Note: KMO = 0.885, 65.6% explained variance.
**$p < 0.01$ (one tailed).

7. Discussion

Two factors?

In line with research by Tyszka and Przybyszewski (2006) and Musil (2005), we found two factors of money perception for the Euro and community currencies: a hard and a soft factor (H1.1). In addition, we could identify a third, idealistic factor in users of community currencies (H1.2). As expected, the soft factor displayed a high and substantial correlation to general trust in a currency (H1.3), with high loads in the credibility of the issuer. This is owing to the fact that modern money is based on 'good faith' (Finn, 1992); it is 'debt money' (Mieg, 2001).

However, the results were not as clear as expected. Gold showed only one integrated factor. The reason may be that gold is not a common currency or a means of exchange and therefore perception of the rare metal is undifferentiated. Furthermore, stability does not seem to be a fix component of the hard factor, sometimes changing exchanging its place with manageability. From the point of view of the users, the hard factor of a currency might be less related to 'hard' economic factors than to practicability. Gold lacks this practical aspect that might be another reason for the lack of a separate hard factor in gold.

Belk and Wallendorf (1990) claim that there is a 'sacred meaning' of money, and perhaps we might have found an idealistic factor for the Euro, too, if we had asked for it (and not for community currencies only). As discussed, in the case of gold we can expect only one undifferentiated factor. In the case of the community currencies, the idealistic factor comprises a broad range of aspects, including ecology, justice, regional attachment and personal enjoyment. From a psychological point of view, this finding underlines the general emotional aspect of money perception as was already observed by James Mill (cf. Wärneryd, 2008) and Tyszka and Przybyszewski (2006). This emotional aspect might also account for the 'sacred' uses of money.

Differences between currencies

As expected, we found differences among the three currencies in all trust-related functional money aspects. The hard factor is highest for the Euro and the soft factor for community currencies. Accordingly, general trust scores highest for community currencies. The patterns are similar for users and non-users of community currencies. However, non-users of community currencies show higher scores in the Euro soft factor and in general trust in the Euro. Thus, it seems a matter of trust whether to stick to the Euro for all purposes or to switch to a community currency.

Moreover, currencies differ as to their preferred uses. As expected, the Euro is preferred for investment, gold for storage and community currencies for donation. Owing to their architecture, community currencies are no alternative to the Euro with regard to investment and storage. We also see that both the Euro and community currencies can be simultaneously used for purchase. This concurs with the intentions of the issuers of community currencies and supports the call for a diverse monetary system of global, national and local money, as proposed, for example, by Lietaer (2001, 2009).

Table 4 Differences between Euro, gold and community currencies in trust-related scales and uses (in users of community currencies, $N = 97$)

	Euro		Gold		Community currencies	
	Mean (non-users, $N = 297$)	SD	Mean	SD	Mean	SD
General trust	3.57^{a} (4.29)	1.58	3.49^{a}	1.86	**5.78**^{b}	1.21
Trust-related scales						
Liquidity	**5.09**^{a}	1.42	2.88^{b}	1.43	3.05^{b}	1.21
Fungibility	**4.62**^{a}	1.07	3.62^{b}	0.96	3.15^{c}	0.79
Stability	2.43^{a} (3.03)	1.07	3.16^{b}	1.44	**3.98**^{c}	1.51
Backing	2.24^{a} (4.24)	1.42	3.94^{b}	1.61	**5.25**^{c}	1.48
Credibility	2.75^{a} (3.17)	1.05	2.66^{a}	1.29	**5.78**^{b}	1.06
Security	3.18^{a}	1.11	3.50^{b}	1.58	**4.61**^{c}	1.46
Manageability	**5.81**^{a}	1.08	2.57^{b}	1.32	4.07^{c}	1.45
Image	3.81^{a}	1.42	3.99^{b}	1.55	**5.55**^{c}	1.29
Ecology	–		–		5.57	1.25
Justice	–		–		5.38	1.29
Region	–		–		5.90	1.03
Enjoyment	–		–		5.02	1.42
Uses						
Purchase	**6.14**^{a}	1.00	1.59^{b}	0.98	4.67^{c}	0.60
Invest	**4.69**^{a}	1.78	3.10^{b}	1.69	2.42^{c}	1.55
Store	3.05^{a} (3.81)	1.70	**4.55**^{b}	1.84	1.73^{b}	1.26
Donate	5.02^{a}	1.71	5.11^{a}	1.80	**5.72**^{b}	1.54

Note: Ratings that differ significantly on the 0.05 level among the three currencies are indicated by different indices. Bold font indicates the highest value among Euro, gold and community currencies.

Trust

We defined trust with reference to Rousseau et al. (1998) as 'to accept vulnerability' for the sake of positive outcomes of social interaction. With regard to money, we trust that we can make use of money or a specific currency in the way we intend to. The high correlation of general trust in a currency with the soft factor of functional aspects – such as the credibility of the issuer or system security (Table 1) – corroborates this interpretation of trust in money. With reference to Luhmann (1979), we can say: trust reduces social uncertainty of a currency system and enforces exchange. This seems particularly true for community currencies (also Richey, 2007).

The scale of 12 trust-related functional aspects of money presented in this study turned out to be useful in shedding light on the motivation for different usages of currencies. It connects the psychological approach to money perception to an economic analysis of the functions and usages of money. Such a 'Money Trust Scale' can substantially add to our knowledge on the psychology of money, complementing other scales such as the YTF scale by Baker and Hagedorn (2008) that focuses on psychological attitudes. The usage of money is embedded in a system of trust (Maital, 1982), comprising the state, banks and sometimes regional networks.

In times of financial crises that are to a large extent characterized by a loss of trust in money, there is a strong need for a deeper investigation of the meaning of trust in money and its implications. Psychology has neglected the topic of money as an essential part of economic psychology for a long time, especially the role trust plays in this equation.

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Appendix

For a list of all items for community currencies in English and German see Table 5.

Table 5 Items for general trust and all trust aspects for complementary currencies

Scale	Item in English	Item in German
Complementary currency		
General trust	Generally, I have trust in my regional money	Im Allgemeinen vertraue ich in mein Regiogeld
	The Regio is a currency that can be trusted	Regiogeld ist eine Währung, der man vertrauen kann
	I have great trust in my regional currency	Ich habe großen Vertrauen in mein Regiogeld
Liquidity	The Regio is accepted everywhere and by everybody in the region	Der Regio wird in der Region überall und von jedem akzeptiert
	With the Regio you can be sure that it is accepted	Beim Regio kann man sicher sein, dass er angenommen wird
	With the Regio you always find the right businesses or business partners	Mit Hilfe des Regio findet man immer gute Geschäfte oder Geschäftspartner
Fungibility	The Regio is good for shopping	Mit dem Regio kann man gut einkaufen
	The Regio is suitable for investments	Der Regio eignet sich gut zum Investieren
	The Regio is a good asset	Der Regio ist gut als Wertanlage geeignet
	The Regio is a suitable for donations	Der eignet sich gut zum Verschenken
Stability	The Regio is a stable currency	Der Regio ist eine stabile Währung
	The value of all existing Regios equals the value of all available goods and services in the region	Der Wert aller herausgegebenen Regios entspricht dem Wert der verfügbaren Güter und Dienstleistungen in der Region
	The Regio is not subject to real inflation	Der Regio ist inflationsfrei
	The Regio does not suffer from a fall of its value over time	Der Regio hat mit der Zeit wenig Wertverlust
Backing	The Regio is valuable	Regiogeld ist werthaltig
	The Regio is backed by values	Regiogeld ist durch Werte gedeckt
	The Regio is of value	Regiogeld ist etwas wert
Credibility	The organizers of my Regio initiative are trustworthy	Die Organisatoren meiner Regiogeld-Initiative sind vertrauenswürdig
	The businesses that take part in the Regio are trustworthy	Die an meinem Regiogeld teilnehmenden Unternehmen sind vertrauenswürdig
	The organizers and the participating businesses will not bring more Regios into circulation than there is economic power in the system	Die Regiogeld-Initiative und die teilnehmenden Unternehmen werden nicht mehr Regios herausgeben, als Wirtschaftskraft im System vorhanden ist
Security	The banknotes of my Regio initiative are forgery-proof	Die Regio-Geldscheine meiner Initiative sind fälschungssicher
	My regional money is secured for the case that participating businesses fail or go bankrupt	Mein Regiogeld ist abgesichert für den Fall, dass teilnehmende Unternehmen ausfallen oder bankrott gehen
	Potential abuse of the Regio by the organizers is impossible	Ein eventueller Missbrauch durch die Regiogeld-Betreiber ist ausgeschlossen
Image	The image of my Regio is good	Das Image meines Regiogeldes ist gut
	I have positive emotions with regard to my Regio	Mit meinem Regiogeld verbinde ich positive Emotionen
	My Regio suits me	Mein Regiogeld passt zu mir

(*Continued*)

Table 5 Continued

Scale	Item in English	Item in German
Manageability	The usage of regional money is simple and uncomplicated	Die Verwendung von Regiogeld ist einfach und unkompliziert
	My Regio is easy to handle	Mein Regiogeld lässt sich leicht handhaben
	The usage of the Regio banknotes is easy	Die Verwendung der Geldscheine bei meinem Regiogeld ist einfach
Ecology	Using regional money, ecological business is possible	Mit Regiogeld ist ökologisches Wirtschaften möglich
	The Regio fosters short distances and helps save resources	Regiogeld fördert kurze Wege und schont Ressourcen
	Regional money unifies people and the environment	Regiogeld ist die Verbindung von Mensch und Umwelt
	By using the Regio, you help the environment	Durch die Verwendung von Regiogeld wird die Umwelt geschont
Justice	The use of regional money leads to more justice	Die Benutzung von Regiogeld führt zu mehr Gerechtigkeit
	The Regio promotes a more just distribution of wealth	Regiogeld führt zu einer gerechteren Verteilung des Reichtums
	The Regio is a medium of exchange that serves all	Regiogeld ist ein Tauschmittel, das allen dient
	Regional money advances fairness among incomes	Regiogeld fördert Leistungsgerechtigkeit bei den Einkommen
	In the long run, the Regio creates workplaces	Regiogeld schafft langfristig Arbeitsplätze
Region	The Regio strengthens the region	Regiogeld stärkt die Region
	With the Regio, the region becomes more independent from the influence of the global economy	Mit Regiogeld wird die Region unabhängiger von den Einflüssen der Weltwirtschaft
	Regional money enhances the image of a region	Regiogeld fördert das Image einer Region
	The Regio helps local businesses	Durch Regiogeld werden einheimische Unternehmen gestärkt
	The Regio helps to fulfil the needs of local people	Mit Regiogeld werden die Bedürfnisse der Menschen vor Ort besser erfüllt
Enjoyment	Regional money is fun	Regiogeld macht Spaß
	The usage of regional money is exciting and nice	Die Benutzung von Regiogeld ist spannend und schön
	The Regio is something for people who are up to scratch	Regiogeld ist etwas für Leute, die gut drauf sind
	Paying with Regios is simply cool	Mit Regiogeld zu bezahlen ist einfach cool