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PRICES IN PARALLEL CURRENCY: THE CASE OF THE EXCHANGE NETWORK OF CHANIA, CRETE

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ABSTRACT

This paper investigates the prices set within the Exchange Network of Chania and tries to examine what prices are attributed to which products and services, how those prices are set and what they reveal about the values of the goods offered. Moreover, the further aim of the paper is to explore the implications of those prices concerning the function of the scheme itself, within the context of the local economy of the Chania area.

The data have been gathered during regular visits to the open markets of the scheme since January 2012. Therefore, the paper attempts to contribute original research findings concerning prices in parallel currency schemes and study several important issues which arise in multiple currency practice

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Of course, all errors and deficiencies of this paper are the author's responsibility only.

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1. INTRODUCTION

This paper attempts to contribute to the knowledge we have about the prices set in parallel currency. Despite the statements of general nature concerning the prices in parallel currency schemes, we do not have much detailed information about the actual prices and what those prices might mean for the scheme and for the economy the scheme represents. The question of prices, therefore, needs to be researched in depth so that we understand how a parallel currency works in real terms.

Such a research would require many team projects to be undertaken and this paper does not do justice to the importance and implications of prices and price-setting in parallel currency. It is rather a pilot study to see whether we can work more with quantitative data outside mainstream economy and explore theoretical, methodological and analytical issues which arise from an economic phenomenon that is still under-researched.

My case study in this paper is offered by the Exchange Network of Chania (www.diktyoantallagonxanion.net/) , which is a parallel currency scheme established in autumn 2011 in the city of Chania, at the island of Crete, Greece. The name of the parallel currency is Unit/Monada and it has been established at a nominal parity of 1:1 with the euro currency, which is the official currency of Greece. The Exchange Network of Chania holds an open market every other Sunday where people can transact using the parallel currency, provided they are registered members of the scheme. The scheme's rule about price-setting is that people are completely free to set the prices they think are appropriate for each case.

The findings presented in this paper is part only of the original data gathered from the open markets, called bazaars, of the Exchange Network of Chania, throughout a time span of 17 months. The findings show that there are certain trends already concerning not only the prices but also the entire function of the open markets. On the other hand, more questions are raised to be researched further. The next section will present the question of prices set in parallel currency literature and section three (3) will explain the methods I used and the issues the data gathering and study involved. Research findings are presented in section four (4) and discussion on findings is in section five (5) if the present paper.

2. THE QUESTION OF PRICES

This paper is not an attempt to use quantitative data for the sake of quantitative methods but to explore certain aspects of parallel currencies with data that happen to be quantitative and also happen to be rarely used in parallel currency analysis. Although parallel currency literature shows a clear agreement among the authors that the main aim is to make goods and services affordable to everyone and make the economy really working, the issue of prices remains somehow vague, in the sense that prices are expected to fluctuate freely within a scheme without specific proposals or descriptions how those prices would work or how they actually work in existing schemes.

On the other hand, several research projects have shown that in certain cases inequalities of the mainstream economy are replicated or even reinforced within a parallel currency scheme, due to the similarity of price rates concerning certain goods and services. However, with the exception of research mentioned below, there is not detailed information about those problems, much less about the exact prices and how those might have been set in previous cases of parallel currency.

Interesting research findings concerning prices in barter or coupons/vouchers and their relation to the mainstream currency exist concerning post-Soviet Russia (Seabright 2000). Prendergast and Stole (2000:35-70) explore theoretically the effects on values and prices when barter exists in an economy under (il)liquidity shock where it seems that it is expected that poor people who cannot wait for a good deal are also in lower negotiating position when they transact without official currency, something that is also confirmed by Caroline Humphrey (2000a: 75-76). Commander and Mummsen (2000:114-146), but also Guriev and Ickes (2000: 147-175) have found that non-monetary transactions in Russia are used to maintain values and prices while there is little official currency to perform trade, which conclusion might be useful in perceiving parallel currencies as tools of price-securing struggle of various social groups or, otherwise stated, of price discrimination and renegotiation (Ledeneva 2000: 298-317). Barter pricing in favour of industrial producers and their produce at the expense of farmers has been evidenced clearly in Russia, which means that discriminatory practices reflect the power relations among producer groups, for example between peasant and industrial producers or between firm directors and firm workers (Humphrey 2000b: 259-297). Particularly about Katanovka local coupons, the prices paid in coupons were higher than the prices in roubles, which brought wide dissatisfaction because companies were at an advantage when selling in coupons for institutional reasons (Anderson 2000: 318-344).

Very important findings have been delivered by Gomez (2012) concerning Redes de Trueque (barter nodes) in Argentina, where remuneration for labour seems to be lower in the barter nodes than in the mainstream economy. Those who owned official currency had better negotiating power and actually determined the prices in the nodes. This situation led to exploitation cases and there is evidence that gender bias in determination of labour prices existed as well, although there were node members who would undertake explicit stance against those practices or modified their market behaviour and pricing according to just price-setting principles.

The gender bias is also a very important axis of such underpricing as Powell (2002) asserts, which means that already established inequalities in mainstream economy reproduce themselves in alternative spaces. Pierret (1999) and Bowring (1998: 103, 106-107) are even more specific:

redistribution is not guaranteed by any mechanism within a Local Exchange Trading System, while the parallel currency might oblige the most disadvantaged to avoid asking for a wage raise as poverty will still force down their claims. Lee (1996: 1380, 1384-1386) has similar worries about parallel currencies possibly becoming class or occupation biased structures, where capital controllers will keep reaping profits and workers ("low-skilled" labour, care workers, women) will be trapped in a more disadvantaged position.

Research findings show that the inequalities tend to be reinforced in low-income sectors although there is no exact information on the pricing process (Aldridge et al. 2001: 567-569, 573-576). However, we know from previous research that the local currency earnings for low-income and unemployed members were lower than the earnings received by the employed and affluent scheme members, because the prices and rates received within the scheme were analogous to rates and payments in formal economy (Williams 1996a: 1403-1411). Favouring the most affluent originated in the fact that wealthy scheme members can buy goods and services produced at lower rates than in the formal economy (Williams 1996b: 90-95).

That we can have asymmetric pricing equilibria when we have trading partners and spaces where more than one currency is used, it is shown by Devereux and Engel (2001). Although their study refers to international trade, one could ask the question whether exchange rates and choices of which currency is the pricing currency each time not only affect but may perpetuate a certain price structure. That is, in case there is an equilibrium in a parallel currency where f.ex. peasants or women are paid less for their products and services, this cannot change without the adoption of certain policies by the scheme or by collectively organised producer groups.

The present paper does not have as its scope to explore in general why people price their stuff the way they price it, although as one may see in the following sections, I have gathered some data on this too. What is important, is to take into account that prices are the surface or small indications of a deeply intertwined set of production means and circumstances, of power relations, of institutions and social arrangements, of state's role in managing the official currency (which at the end affects parallel currencies and barter too) and of the social position of agents on both individual and collective levels (Beckert 2011). Let's say that the lack of literature on parallel currency prices constitutes a condition of performing trust in currency schemes ((Beckert 2005) that people will set prices with good will and without intention of exploiting others, which in principle is always important to establish the scheme but it is not enough when a scheme functions and aspires to function long term.

From my own research with the Exchange Network of Chania but also with many other parallel currency schemes in Greece, it seems all schemes really stick with the common view in literature that free prices are enough a mechanism to ensure a proper function for the parallel currency, i.e. to ensure that all members have a chance to transact, sell products and cover needs through the schemes [There is only scheme in Greece having set upper and lower price limits. I have not any data on actual prices and how the price limits have affected the price setting process]. Moreover, nominal parity with the euro currency is also adopted by the schemes. However, this parity choice has its own conveniences and inconveniences. In October 2012, at an open Conference organised by the Department of Sociology of the University of Crete, the schemes of Crete discussed for the first time openly the issues which are created by the parity with the euro currency, mostly the transfer of mainstream pricing to the parallel currency schemes. The discussion has just begun and the schemes have not reached any resolution yet about this issue.

Concerning my own research questions, those are related exactly to an effort to trace mainstream pricing patterns hidden in parallel currencies which create inequalities or redistribution in favour of the advantaged members. After having explored the same question through qualitative data (Sotiropoulou 2012a), I believe that quantitative data can be enlightening too. Moreover, if anyone would see an alternative potential in parallel currencies for a fairer, more democratic and more egalitarian economy, this could not be possible without fair prices (Sotiropoulou 2012b). Of course, the present paper is more modest in its scope. It just attempts to show actual price patterns and raise questions on how those patterns might affect the scheme economy.

3. METHODS USED

Given that the Exchange Network of Chania does not keep record of prices which appear within the scheme, I gathered the data myself. I opted for attending the bazaars of the network i.e., the open markets held every other Sunday and I collected information on the goods offered there. Of course, many goods and services are transacted within the scheme in other times and spaces, as many members prefer not to attend the open markets and to perform instead their trading by the use of the online system only. Moreover, services cannot really be provided in the bazaar. Information about prices exists also on the Forum of the Exchange Network of Chania, but I did not use the price information found there, because many of the products are also offered at the bazaar. Moreover many items are advertised at the Forum without any price announced for them.

As a consequence, it seemed that for the first stage of price-setting exploration the open markets would offer a satisfactory insight. Therefore, I visited twenty two (22) bazaars from January 2012 to May 2013 and I collected price information directly from the people who were at the bazaar stalls.

In many cases people were not sure what the prices of the items were, even if they were about to sell those items. It was obvious that they were also experimenting with prices, which means that probably after a couple of years, they might have a completely different attitude or choice of

prices, as well. In other cases, they were telling me the general prices, but they were also pointing out that in case of bulk buys, they were willing to offer better deals to the buyers. That means, prices can be even lower than what I was writing down at my notebook.

The issue of quantity and measures was an important one, concerning food or cosmetics. For own-produced stuff, most people did not have usually measured the exact quantity of the product. Therefore, most quantities written down and used for this paper are calculated at an approximation. An important note should be made here: people were not measuring because it was difficult in practical terms, not because they had any intention of cheating. In all cases I randomly asked them to measure quantity of a good offered, it was equal or more than the quantity they had stated it is. Keeping saying less than the probable quantity sold was quite common in the bazaars. Therefore, it is probable that the need for calculating prices with some exactitude might be unfair to all those people who knowingly or not, opt for a very special type of "generous measure" (Gemmill & Mayhew 1995: 81-109) in order to trade in the Exchange Network of Chania open market.

One more important point concerning prices is that the online software the Exchange Network of Chania used till late May 2013 did not accept but only prices in whole units or at least prices ending in half unit (0,5). Scheme members, though, have been inventive whenever they wanted their products to be priced in a different way. For example, anyone who wanted to price his fruit as 0.33 units per kilo, priced them as 1 unit per three kilos. That means, many prices used in this paper have been set in this way and then I calculated the price per kilo in order to make prices comparable.

The data gathered was raw and covered all types of goods offered at the bazaar. Some services are also advertised in the bazaar and I kept writing down their prices, but it is impossible to have any picture about prices on services without a questionnaire. For the purposes of this paper, I selected ten kinds of goods which are offered within the network and I tried to combine the price data with the dates of the bazaars I attended to see how the prices are evolving through time. I have not attended every bazaar but the twenty two bazaars I attended cover the entire time span of seventeen months from January 2012 to May 2013. I kept all prices concerning each good intact i.e., there may be several different prices for the same good at a certain bazaar. To show the various prices in each bazaar in the graphs, I use different colour for each price bar whenever there is variety in prices.

The people who sold the stuff explained the prices in terms of quality of the product, or in terms of the work it needs to be produced, or in terms of prices in the mainstream economy i.e., the euro currency prices. Price plurality seemed important, not only because it is not possible for me to verify quality or skill and work time needed to produce something, but also because I think this is the essence of the parallel currency: if I stick with an average price at this stage of research, maybe I would miss important information that still has not been crystallised concerning the price setting behaviours.

At this point, I should state that I take all statements about quality of the products as true – just like the general rule of trust and solidarity of the scheme requires. I could also say that any product or service I received personally as a member of the scheme was of high quality and complaints about quality have not been known so far (apart from one case which was mentioned anonymously at a scheme assembly).

In the following section four (4), there follow the graphs concerning the prices of ten kinds of goods, most of them produced by the scheme members themselves. I opted to present only two goods which are sold as second-hand stuff (women's clothes and adults' shoes) although there are many used goods which are sold in the Exchange Network of Chania. The reason is that I thought that for the purposes of this paper two only are enough to show the trend in used goods. On the other hand, I preferred to stick with foodstuff which is produced and traded in the scheme.

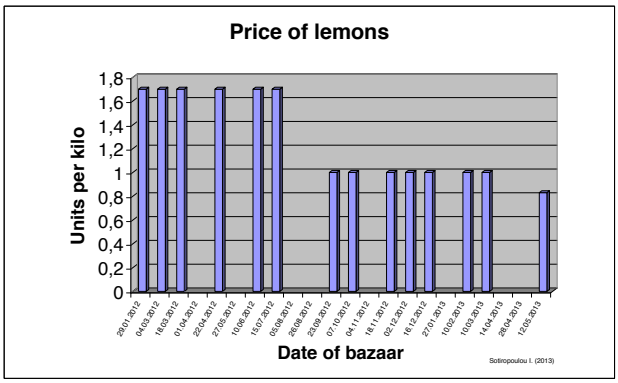
4. PRICES IN PARALLEL CURRENCY FOR TEN KINDS OF GOODS

For each good, there is one graph concerning price data gathered. In each graph, the exact date of each bazaar is written, so that it is clear when the data has been produced. In cases where there is no price data for a bazaar, it means that this item was not found in that specific bazaar. It has not been possible to have any data gathered on bazaars I could not attend.

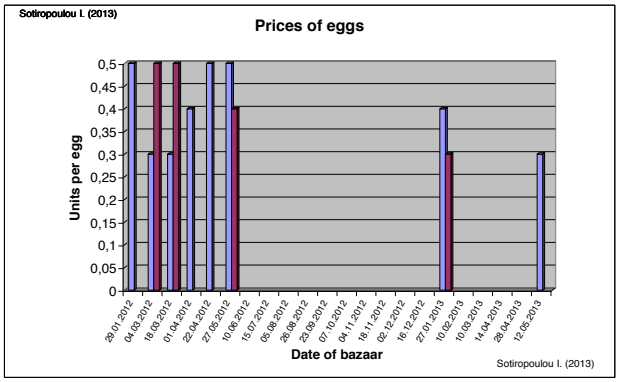
4.1. Lemons

All lemons offered in the bazaars are produced by the scheme members and they are cultivated without the use of agro-chemicals. Lemons are very popular in local cuisine, because they are used in most foods and salads, let alone juices, sweets and jams. Then, it is a product with regular demand.

From the graph, one can see that the price of lemons has been falling during the 17 months of the data collection. In some bazaars there were no lemons, but whenever lemons exist their price was the same all over the bazaar. However, one could attribute this to seasonalities of production. Therefore, safe conclusions could be drawn after some years of bazaar performance.



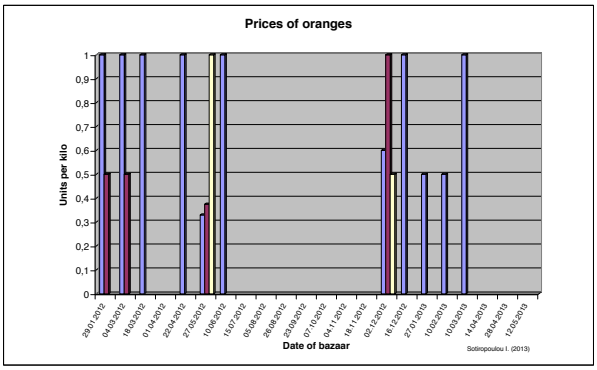
Graph 1: The price of lemons



Graph 3: The price of eggs

4.2. Oranges

The availability of oranges in the bazaars resembles more or less the availability of lemons, thus seasonality might explain when oranges are sold in the bazaar. The prices of oranges seem to be steadily varying i.e., there are oranges priced at 1 unit per kilo and oranges priced at 0,5 unit per kilo, or even less in some cases. Variety of prices for oranges exists in the very same bazaars. Some producers explained this to me by the type of oranges sold in each case. Oranges are also self-produced organically by the members who sell them.



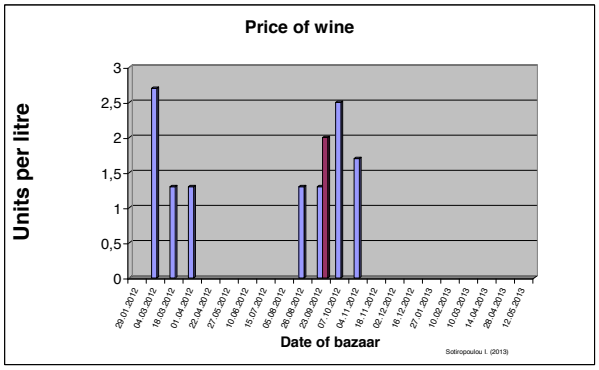
Graph 2: The price of oranges

4.3. Eggs

Concerning eggs, many transactions were made outside the bazaars, as one could see from the scheme's online forum. Then, the graph is only indicative concerning the bazaars and reveals the price variety concerning this product. To be sure whether the variety in prices in the early bazaars really led to a price reduction after a year, we would need data from other sources, perhaps to gather more data from future bazaars. All eggs are organically produced by the scheme members who sell them.

4.4. Wine

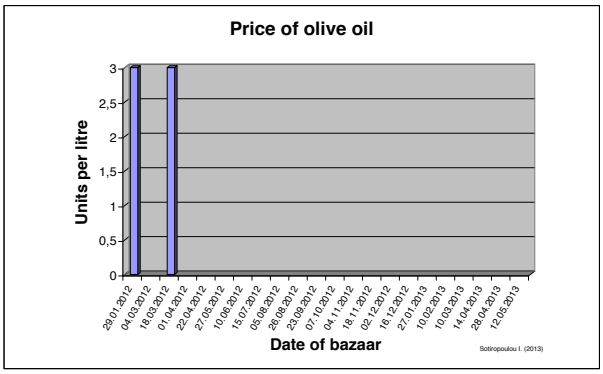
Unfortunately, despite that wine is widely produced in the area of Chania, both in small farms and in households, it was not so common a good offered in the scheme bazaars. One could also attribute this lack of availability probably to low demand: if every household has wine, then probably small producers of wine do not find it satisfactorily remunerating to attend the bazaar, once anybody can buy wine at any other time. Prices are low anyway, which means that for a producer to spend his Sunday in the bazaar, he/she would need to sell many litres of wine to have an incentive to come.



Graph 4: The price of wine

4.5. Olive oil

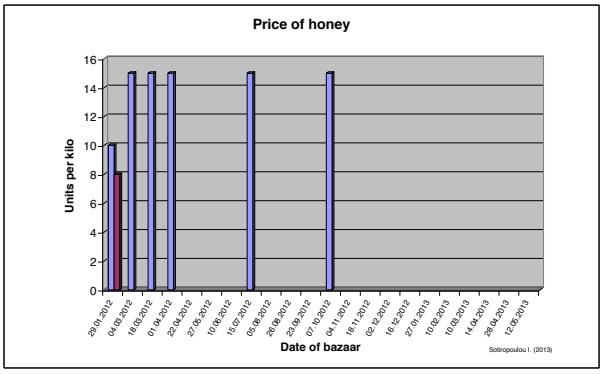
The case of olive oil is also indicative of the producers' case. Olive oil as a product appears a couple of times in the early bazaars and then it did not appear at all. Many people were commenting in the bazaars that "we all have olive oil", then they would not buy more. Of course, I have seen demand and offer of olive oil in the online scheme's forum, which means that people were trading olive oil without waiting for the bazaar. Particularly for households who would want to buy five litres or more, the difficulty of transport of olive oil containers would make their visit to the bazaar inconvenient.



Graph 5: The price of olive oil

4.6. Honey

Honey is also a very interesting case. In the early bazaars, it was a good regularly offered. However, afterwards, there was only one producer offering certified organic honey, which was more expensive than the non-certified. Even that producer did not offer honey after some time. I do not know whether his stock was over or he did not find it rewarding to sell his honey at the bazaar anymore. Honey has its own seasonality, although it does not deteriorate if stored properly, which means that small producers do not have to follow that seasonality that much.



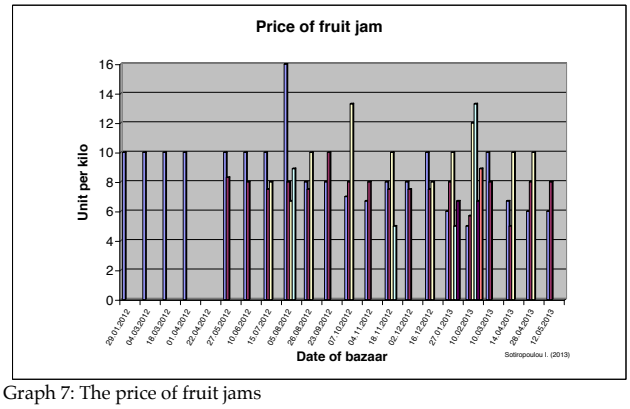
Graph 6: The price of honey

4.7. Fruit jams

Fruit jams are very common and popular at the bazaars of the Exchange Network of Chania. Given that jams are a good way to store fruit which otherwise would not be consumed and at some point it would not be consumable anymore, they form a type of product which every household can produce and any seller can stock in case buyers do not buy immediately. Therefore, there is an extended variety of jams in the bazaar: orange, lemons, grape fruit, citrus, quince, figs, kumquat, rose flowers, apricots, sweet pumpkin, huckleberry, apricot, mulberry etc. Consequently, prices also vary because some fruits need more time to be collected, and some other need special preparation to make the jam. Additionally, seasonality of the fruits affects the availability of the types of jams and consequently their prices.

It is very interesting that jams might have some seasonality, but they are not as seasonal as the fruits themselves. On the other hand, the popularity of this product, and its ability to be stored for long might have given incentives to produce more and even lower the prices, as the following graph shows.

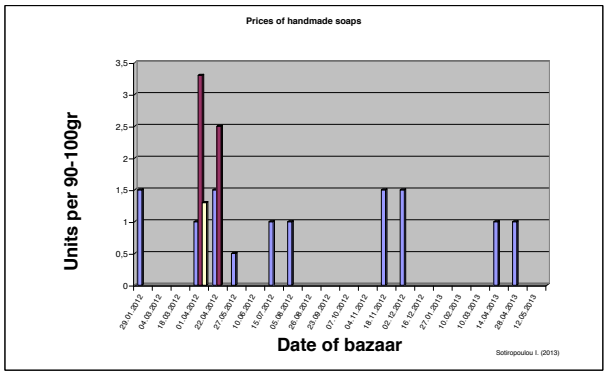
One more thing that is very obvious from the graph is that price variety, linked to product variety, increased as time went by. That means, more people entered the jam market for parallel currency and they also had the chance (or were pressed) to lower the prices. I can tell that people who make jam, i.e. have tools and know-how to make it, usually do not make only one type of jam. Which means that the colourful bars indicating variety in prices (and products) having a downward propensity might be an indication to search for small economies of scale and efficiency improvement.



Graph 7: The price of fruit jams

4.8. Handmade soaps

Handmade soaps are available through the Exchange Network of Chania, but they seem not to appear regularly at the bazaars. All soaps are made with natural ingredients. We cannot reach any definite conclusion through the data we have so far, apart from the indication that in the early bazaars prices varied.



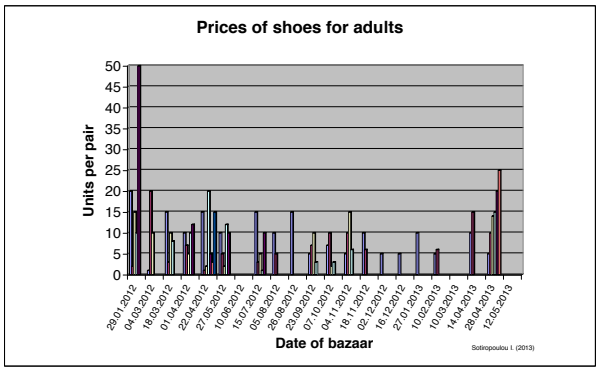
Graph 8: The price of handmade soaps

4.9. Used shoes for adults

For this graph, I did not distinguish between shoes for men and women, however each price collected has been annotated for which the shoes might be. Children's shoes are not included in this graph, as I left all children's items (like clothes, shoes, accessories, books and toys) for another paper.

It has been observed that for used stuff, prices might vary enormously from prices which are "symbolic", like 1 or 2 Units, to prices which remind of the mainstream shoe-store prices. Quality is not the only argument for the price of a pair of used shoes; neither is always the condition of the item sold i.e., many "new" things might have a very low price. Many sellers just want to get rid of the shoes they do not use anymore, then they sell them at very low prices, while other want a certain remuneration for the shoes they sell, even if the shoes are apparently used.

In brief, used shoes are very regular items offered at the bazaars and their prices vary very much. The colourful bars show exactly this trend but also the variety of the items offered in the parallel currency open market.

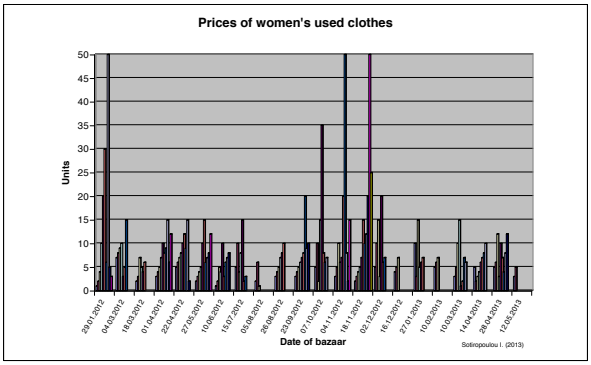


Graph 9: The price of shoes for adults

4.10. Used women's clothes

Just like adult's shoes, women's clothes can be found in every bazaar, and the prices are usually low. Prices which are very high usually refer to designer clothes or leather coats i.e., to clothes which have been purchased at a very high price in the mainstream market. Probably, there is some seasonality with clothes and shoes too, depending on the season change. In other words, maybe the availability of clothes and their prices might rise in times of change of season, when everyone decides which clothes needs and does not need for the next winter or summer. At the end, of course, it seems that the variety of prices remains stable at some levels.

Concerning the variety itself, it seems similar to the price variety of shoes, as the many bars (in different colours) for each bazaar date show. There are sellers who just want to empty their closets and keep prices low to sell quickly and others who want to make some more units out by selling their clothes and prefer to set up higher prices. What is important, is that most sellers give a similar price to all similar items they sell (same price for tops, same price for skirts, same price for trousers) irrespective of let's say, fabric quality or design, in order to avoid detailed pricing for each item. Other sellers prefer to price each item separately, however they still keep items with same price at the same areas, so that they can inform the potential buyer quickly and clearly about the cost of each group of items.



Graph 10: The price of women's used shoes

5. DISCUSSION

Perhaps, it is too early to reach any safe conclusion. However, from the data I have till now, I would assume that there are already some price trends in the bazaars of the Exchange Network of Chania and it remains for future researchers to examine what the trend will be from now on:

a) Used things are regularly offered in the bazaars and at a great variety of prices. They mostly originate in goods that scheme members have bought in the mainstream economy and for any reason, they do not want them anymore. People

are interested in buying used things, particularly clothes, but used clothes are always too numerous compared to the demand, as everyone seems to have bought more clothes than what he/she would need in a medium term timespan. Seasonalities in used clothes and accessories might exist in quantity available in the scheme, but this does not affect much the availability and the prices of the items. In other words, it seemed that used clothes always exist in the bazaar and their prices always vary from stall to stall. I have no data on quality seasonality of used stuff, but I know that people were happy to find clothes without needing to use official currency.

b) Some locally produced food items are also more or less regularly available at the bazaars, based on the seasonality of their production i.e., the natural circle of producing fruits and vegetables. It seems that their prices are stable or slightly falling through time. There is needed another research project to explore the reasons of this stability or slight price fall through time as the data I have so far cannot give any possible explanatory ideas on this question.

c) Some locally produced food items are available through the network but they are not regularly available at the bazaars. They might be traded through other channels of communication, like the online scheme forum or the e-mails and cell phones of the scheme members, which are free to trade at any time and place they think of as appropriate. The overall trend for most of them is that their prices are low or tend to be stable and/or falling, but if those products are not available at the bazaars one could ask whether the producers are not happy with the prices they can negotiate at the bazaars or whether there are any other problems. Neither is known how scheme members make decisions on where to sell, at the bazaar, at their place or at other spaces. Convenience or marketability are only hypotheses who need to be checked further, as the price data do not help on this question.

d) In other words, the cost of transporting products (some of them, if cut from the field, would need to be disposed within certain time span) and spending almost an entire day, particularly a Sunday, at a bazaar might be too high for producers to dispose their produce at the scheme bazaar. If this is combined with low demand and/or low prices, then it might be understandable that producers might prefer to sell at other time and place and not in the bazaars. That does not mean that they might see the bazaar as a burden only, but I try not to evade the hard work of a producer and seller entailed in a parallel currency scheme with other aspects of economic activity, like socialising or meeting friends or visiting the city centre after the bazaar etc.

e) As a researcher, I find the analogy between the availability and prices of foodstuff and used stuff somehow worrying. If one observes the graphs, one would see that at the end, what is always available at the bazaars is the used stuff. Foodstuff has other rhythms of appearing and disappearing from the bazaars. Prices are also a big question, in the sense that food producers sell work they have originally done for the scheme, while clothes sellers sell work which has been integrated into the clothes that have been produced outside the area of Chania, probably outside the country or continent – and this work originating in the clothes has been acquired by the scheme members originally for purposes other than contributing to the scheme and its aims.

f) From what has been observed till now, the tension between industrial goods, not produced by scheme members, and non-industrial goods, produced by scheme members, is present and transcends the entire function of the scheme. In other words, industrial goods are still everywhere and attracting high prices in parallel currency, although the scope of this currency is to enhance local production, direct disposal of produce and small producers themselves. I write this having in mind all the data I have for all goods and prices in the bazaar of the scheme. Price levels though are evident still in the data published in this paper, although I tried to give more data on locally produced stuff.

g) Copying the mainstream prices with a parallel currency is more or less a normal effect, if a scheme adopts any nominal parity with the official currency. The question is what possibilities exist to reverse mainstream valuations of goods and services, or to redistribute value which is transferred to the advantaged people through the mainstream economic and monetary system. How can a parallel currency achieve such an aim or, at least, have prices in parallel currency anything to do with such a question?

Hopefully, analysing the rest of data, and possibly gathering more data in the future will clarify better both the trends of prices and the effects on local economy.

6. CONCLUSIONS

My intention in this paper was twofold: first to show what we can learn or question to learn from price levels in parallel currency. Second, I have several questions concerning methodology; parallel currency prices and parallel currency price-setting. We would need another research project to verify exact, i.e. price-detailed similarities, but also disparities with price-setting procedures in the mainstream economy. General trends are not enough to define price-setting mechanisms, let alone that qualitative methods would also be needed to discuss with participants in detail each pricing, either from the seller or from the buyer point of view. How should a researcher deal with this vagueness and variety of prices? What methods should a researcher use to acquire accurate data and knowledge over the price-setting in parallel currency under the main condition of emerging transaction tools that even the scheme members themselves experiment with?

This paper showed that there is vast data and this can also be quantitative concerning parallel currencies that researchers need to explore, gather and study. Moreover, it showed that even if it is impossible to quantify economic activity in parallel currency as economists do in the mainstream economy, quantity, and specifically prices are one aspect among many that we need not to ignore in order to

have a more global view of a scheme activity. Perhaps, we need to examine, improve or re-invent quantitative methods to be appropriate for parallel currencies. Hopefully, other researchers would also be willing to work on this aspect of parallel currencies to make possible comparison, discussion and improvements in both theory and practice.

REFERENCES

Aldridge T., Lee. R., Leyshon, A., Thrift, N., Tooke, J. & Williams, C. (2001) "Recasting work: The example of Local Exchange Trading Systems". Work, Employment & Society. Vol. 15 (3) pp. 565-579.

Anderson, D. G. (2000) "Surrogate currencies and the "wild market" in central Siberia". In Seabright, P. (ed.): The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press).pp. 318-344.

Beckert, J. (2005) "Trust and the performative construction of markets", MPIfG Discussion Paper 05/8, September. (Cologne: Max Planck Institute for the Study of Societies).

Beckert, J. (2011) "Where do prices come from? Sociological approaches to price formation". Socio-Economic Review. Vol. 9, Advance Access Publication – April 27, pp. 757-786.

Bowring, F. (1998) "LETS: An eco-socialist initiative?". New Left Review. No. 232 (November-December) pp. 91-111.

Commander, S. & Mummsen, C. (2000) "The growth of non-monetary transactions in Russia: causes and effects". In Seabright, P. (ed.) The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press) pp. 114-146.

Devereux, M.B. & Engel, C. (2001) "Endogenous currency of price-setting in a dynamic open economy model", Working Paper 8559, October. (National Bureau of Economic Research -NBER) http://www.nber.org/papers/w8559 .

Gemmill, E. & Mayhew, N. (1995) Changing values in Medieval Scotland – A study of prices, money and weights and measures. (Cambridge & New York: Cambridge University Press).

Gomez, G. (2015): "Price formation in the Redes de Trueque – Argentina 1995-2005". International Journal of Community Currency Research, 19, D, pp. 42 - 52.

Guriev, S. & Ickes, B.W. (2000) "Barter in Russia". In Seabright, P. (ed.): The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press) pp. 147-175.

Humphrey, C. (2000a) "An anthropological view of barter in Russia". In Seabright, P. (ed.) The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press) pp. 71-90.

Humphrey, C. (2000b) "How is barter done? The social relations of barter in provincial Russia". In Seabright, P. (ed.) The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press) pp. 259-297.

Ledeneva, A. (2000) "Shadow barter: economic necessity or economic crime?". In Seabright, P.(ed.): The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies (Cambridge, UK: Cambridge University Press) pp. 298-317.

Lee, R. (1996): "Moral money? LETS and the social construction of local economic geographies in Southeast England". Environment & Planning A. Vol. 28 pp. 1377-1394.

Pierret, D. (1999) "Cercles d'échanges, cercles vertueux de la solidarité - Le cas de l'Allemagne (Exchange circles, solidarity virtuous circles – The case of Germany)".International Journal of Community Currency Research. Vol. 3. downloadable from the website www.ijccr.net

Powell, J. (2002) "Community Currencies: Alternative Development at the Conjuncture". International Journal of Community Currency Research. Vol. 6, downloadable from the website www.ijccr.net

Prendergast, C. & Stole, L. (2000) "Barter relationships". In Seabright, P. (ed.) The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press) pp. 35-70.

Seabright, P. (ed.) (2000) The vanishing rouble – Barter networks and non-monetary transactions in post-soviet societies. (Cambridge, UK: Cambridge University Press).

Sotiropoulou, I. (2012a) "Marketing a vintage carpet in a free bazaar and other stories on/off value". Paper at the 3rd International Conference in Political Economy "Political Economy and the outlook of capitalism", held (5-8.7.2012) in Paris, France, organised as a Joint Conference by AHE, IIPPE & FAPE.

Sotiropoulou, I. (2012b) "Is there a fair and just price in solidarity economy?". Paper for the VII Congress of the Network RULESCOOP "Social economy: identity, challenges and strategies" held (5-7.9.2012) in Valencia & Castellón de la Plana, Spain

Williams C. C. (1996a) "Local Exchange and Trading Systems: A new source of work for the poor and unemployed?". Environment & Planning A. Vol. 28 pp. 1395-1415.

Williams C. C. (1996b) "Informal sector responses to unemployment: An evaluation of the potential of Local Exchange Trading Systems (LETS)". Work, Employment & Society. Vol. 10 (2-June) pp. 341-359.