IJCCR PUBLICATIONS: A LITERATURE REVIEW 2009-2016

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ABSTRACT

This paper aims at a literature review of all scientific articles published in the International Journal of Community Currencies since 2009 in order to identify research patterns and research gaps in the literature. It complements the work done by Schroeder (2011) and Seyfang (2013), among many others, who have focused on characterizing the literature and practice in this field of research. A universe of 78 articles retrieved from IJCCR website in November 2016 are statistically analysed, taking into consideration their structure, methodology and key conclusions as well as research gaps and future research needed in the field of complementary currencies. Although a strong heterogeneity can be found in the number of publications per year as well in the sample characterization, both in format and content, our analysis enables clear patterns of the IJCCR in the past eight years to emerge and research gaps to be identified, specifically the need for longer, more in-depth, comparable and methodologically coherent socio-economic impact assessment of CC experiments; more and better knowledge regarding optimal scale and design optimization; deeper recognition and understanding of socio-psychological factors influencing CC implementation and success; sustainable governance options and impacts; and finally, more research done into multiple currency interfaces and exchange mechanisms between complementary currencies. These gaps and research needs are presented and may serve as potential guidelines for future publications within the Journal as well as the establishment of more refined research agenda for IJCCR that serve the evolution of scientific knowledge in this growing field.

KEYWORDS

IJCCR Literature review; research gaps in complementary currency literature; trends and biases in the IJCCR publications

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1. INTRODUCTION

This paper aims to honour and better understand the field of complementary currencies through investigating a period of eight years of papers published in the International Journal of Community Currency Research (IJCCR). Not only past research was analysed, but also the published authors, their backgrounds, and what they see as future needs, steps, opportunities and challenges. It presents a holistic perspective into IJCCR knowledge creation and dissemination in the post-recession period, by diving deep into the microcosm of each individual publication and author. While not covering the entire range of publications of the Journal – the IJCCR has been publishing since 1998 – we have considered 2009 a cut-off point for our analysis, not only for its symbolic meaning but taking into consideration the structure and distribution of publications prior to and after the great financial recession of that year, namely the fact that it is after 2010 that the IJCCR published its first and second Special Issues and co-supported the first three international conferences dedicated to complementary currency research.

This literature review aims at complementing and enriching the existing and on-going systematization, mapping and understanding of complementary currency (CC) research worldwide while opening up the possibility of a future integral management of this field of research that would allow other researchers to more easily tap into existing publications and complement, compare or further analyse international CC research. By no means this literature review presents an overall state-of-the-art of CC research worldwide or aims at a global picture of CC research in the past decade, as we do not consider our sample within the IJCCR publications fully representative of CC research. Nevertheless, being the IJCCR one of the reference journals within this field and the period considered the most prolific in terms of scientific publications we believe this work to be an important contribution to our common understanding of CC developments and CC research.

Section 2 below discusses the methodology used, while in section 3 the results from the analysis are briefly presented before section 4 presents a proposal for an IJCCR research agenda beyond 2018 based on our findings.

2. METHODOLOGY

This paper is based on a literature review of a universe of 78 articles published in the International Journal of Community Currency Research (IJCCR) in the period 2009-2016 corresponding to Volumes 13 to 20 of the Journal. For matters of coherence in the analysis, book reviews as well as editorial and introductory notes were not included in our sample.

Our analysis considered four separate components: structure; methods; conclusions; and research gaps. Each component contained a set of variables that were registered and coded. Regarding structure, we considered the following variables: name, gender, nationality, affiliation and academic background of main author; name and number of co-authors; number of pages, references and IJCCR references per article; key author referenced. Regarding methods our variables were: nature of the research – theoretical, empirical, both or none; research methods used; macro or microeconomic modelling used (Y/N, which model); time of the analysis – prospective, retrospective, none or both; number, scale, name, country and type of complementary currency in the case study; impact assessment; and finally, the use of new methods of research. Considering the conclusions, we retrieved the main considerations made in the end of each article highlighting common visions as well as dissonant opinions. Finally, and concerning research gaps, we’ve clustered them into four separated areas that emerged from our analysis and that inform the final section of this paper where a research agenda for IJCCR for the period beyond 2018 is proposed.

All data was retrieved from the consultation of each paper downloaded directly from the IJCCR website and analysed using Excel spreadsheet and Excel statistical functions. The database will be made available after publication of this article for researchers willing to follow-up and complement our work.

3. RESULTS

In this section, we present key results for the above-mentioned components of our analysis, starting with more quantitative analysis regarding ‘Structure’ and ‘Methods’ and moving after to a more qualitative analysis concerning the main conclusions retrieved and summarized and research gaps identified. The discussion of these results
feeds directly in to our later section where an IJCCR research agenda beyond 2018 is attempted. All data refers to the period 2009-2016 unless clearly stated otherwise.

3.1 Structure

Between 2009 and 2016, a total of 78 scientific papers were published in the IJCCR. In this eight-year period the average number of publications per year is ten articles. However, and as can be seen in figure 1 below, yearly rates vary significantly from the average, showing the impact of IJCCR supported and co-organized conferences (2011, 2015 and 2016) and Special Issues (2011, 2012). With 23 publications 2011 is the most ‘productive’ year of the IJCCR representing 30% of all publications, while 2014 is the least productive with only two scientific peer-reviewed articles.

![Figure 1 - Total number of articles published by IJCCR per year from 2009 to 2016](image)

Regarding the composition of authorship, and although the author with most published paper is Dr. Irene Sotiropoulou (three published papers), the IJCCR is not a gender balanced Journal, even when the gender of the main author is considered – 62.8% men and 37.2% women. Findings also show that most authors prefer to publish alone (70.5%) while only a minority (15.4%) co-authored with more than one other researcher, making Fesenfeld et al (2015) with six authors a clear outlier. No explanatory variable was found statistically relevant for this trend towards single authorship.

Regarding the nationality of main authors, half are Europeans (52.6%) and the top 4 countries – USA, Germany, UK and Japan – together represent 52.6% of all publications. Africa is the least represented continent (one author only, from South Africa), and some countries recognized by their vibrant complementary currency tradition are underrepresented, such as in the case of Brazil (only one author, Freire 2009). This unbalanced distribution of authorship regarding nationality can also be found in the case studies presented and discussed in the articles of our universe, where a large majority of projects under regular research are in Germany, UK and the USA.
Regarding the academic background of the first author, 35.8% are from the discipline of Economics while only 11.5% are from Business Administration and Management, 7.7% from Sociology, 2.6% from Law and 1.3% from Finance. The remaining 41% that we have considered as “Others” either represent other disciplines such as Engineering, Philosophy or Forestry, or mixed backgrounds that were difficult to trace back and/or cluster into a single discipline. Of note is also that a clear majority of first authors reported their affiliation to a University (67.9%) followed by NGOs and Cooperatives (16.7%) and Research Centres (5.1%). Other organisations and institutional bodies such as central banks and private companies have only a minimal presence, while authors primarily affiliated with commercial banks, municipalities and other government institutions have not yet published in this Journal during the period investigated here. Two authors are present as 'Independent researcher'.

Regarding the format of the examined articles, they have on average 10.6 pages – including bibliography (Average deviation (AVGDEV) 3.32), 28.8 references, including references to grey literature and webpages in accordance with the practice of the journal (AVGDEV 16.63), and two references per article to IJCCR publications (AVGDEV 2.14). As can be seen in the average deviation, the numbers of references per article vary significantly. Important to note that the percentage of IJCCR references per publication also increased during the period, especially after 2013, with an average of 14% in 2013-2016 compared to 4.7% between 2009 and 2012. The most referenced author is by far and for the entire period Gill Seyfang from the University of East Anglia, followed by re-knowned authors Bernard Lietaer and Peter North. Other common referenced authors include names such as Thomas Greco, Silvio Gesell and Karl Polanyi.

### 3.2 Methods

Concerning the methods used to research complementary currencies in the given period, most analyses are based on empirical data and case studies rather than theoretical explorations, which represent only 23% of the sample (see figure 3 below). Therefore, it is not surprising that 84% of all publications have a retrospective temporal dimension while only 19% have both past and future and 5% are extemporal in their analysis ("None"). These findings are consistent with the research methodologies used: 51.3% of all authors support their research primarily with secondary data, specifically literature reviews and analyses of meeting minutes; 16.7% use 'Mixed methods' approaches; 9% supported their findings in questionnaires; and finally, 7.7% are participant or non-participant observations. The explicit use of Participatory Action-Research (PAR) methodologies is rarely mentioned.

Still regarding research methods, 95% of the publications do not use econometric models or any kind of macro, micro or monetary economic modelling for the analysis. In those that use economic modelling, 75% are prospective with a single regional case study.

Regarding case studies, 81.4% of the total sample discusses one or more case studies, with almost half (49.2%) having a single case study as the basis for research – see figure 4 below. From the case studies and projects researched, 37% are either local or regional in scale, 25% and 12% respectively, while 28% of all publications contain a nation-wide analysis and 16% include cases from several countries or even with a global scale, such as Bitcoin. Nevertheless, most cases presented and discussed are based in just 6 countries - USA, Germany, Japan, UK, Greece and France – with the Chiemgauer, the SOL and the UK transition currencies (Bristol Pound, Brixton Pound and Stroud Pound) as the most researched experiments.
Using the typology of complementary currencies proposed by Jêrome Blanc (2011), with a minor change, we clustered all publications in 6 different typologies: G1 – LETS and other Mutual Credit Systems; G2 – Time-banks and time-credit systems; G3 – Local and community currencies; G4 – Regional currencies; G5 – Digital global currencies; G6 – Others. Figure 4 above illustrates this and shows a clear trend towards local and community currencies as well as LETS and Time Banks. We’ve found only two articles that focus on Bitcoin as the world’s most famous digital global currency and also two articles which have taken into consideration all typologies (G1-G5) in their research.

Finally, 35% of the articles analysed included some level of impact assessment of the complementary currency in economic, environmental and/or social variables. In most cases a partial analysis using basic data is available while only a minority – less than 5% - includes a thorough, exhaustive and mid to long impact assessment (more than one year of systematic data collection and analysis). Due to the variety of methodologies, indicators, proxies and the mixed temporal window used in the impact assessments, a comparative analysis between assessments or even a compound macro simulation would prove hard to accomplish.

### 3.3. Main conclusions across published papers

“The development of community currencies has reached a crucial stage: it has become evident that the attempts of small groups of social activists to overcome the scarcity of money are not sufficient to create alternatives. It will also be necessary to enter a political struggle and campaign for appropriate framework in which economically viable community currencies can prosper” (Schroeder, 2011).

If there is a main conclusion we’ve taken out of all these papers own conclusions is that complementary currencies are not the magic solution that will solve all our economic challenges, let alone the wider societal and ecological problems. The potential for societal transformation through re-designing and reconfiguring economic exchange and interaction is there and it’s widely recognized by the IJCCR authors as well as the potential for CC’s to be "strategic targets for evolutionist institutional design in order to solve current social and economic problems caused by global capitalism" (Nishibe, 2012). However, experiences in co-designing, implementing, managing, financing and sustaining an impactful CC initiative face multiple challenges and require much more than just good intentions and some know-how. And this is particularly evident in the case of ‘social currencies’ in which key objectives involve the reduction of income inequalities, fighting long-term unemployment, integrate vulnerable populations, value non-monetized economic activities, fight gender discrimination, etc. As Ricardo Orzi points out: “History gives us evidence of the low sustainability of social complementary currencies within the capitalist market system. (...) Designing a social currency to promote a ‘new economy’ requires thinking of it as one element in a transition and within a transitional configuration which may evolve in different ways into a future ‘new economy’.” (Orzi, 2015). While most authors with concrete cases studies recognize the limited economic impact of CC’s, only a small fraction points out processes of gentrification, exclusion and the mimicking of old monetary patterns.
of control, hierarchy and non-transparent management set within CCs. Scott Cato words still stand mostly unquestioned and un-responded: “Perhaps the most telling criticism is that it is not a serious economic endeavour at all, but rather a game for middle-class activists who have other sources of livelihood.” (Scott, 2012).

Nevertheless, the movement is growing and although many authors find it impossible to measure with accuracy the number, diversity and scale of CC’s around the world, research shows that every year more and more experiments and CC initiatives are reported worldwide – see for example Neil Hughes for the case of Spain (Hughes, 2015). As the number and scale of CC’s around the world grows more and more, concerns are being raised that demand clear and timely answers. As Lizzote mentions in 2011 “This [CC use] raises the legal question of where does the civil right of exchanging informally become tax evasion.”. And she is not alone as several authors question the appropriate scale and function of complementary currencies within the current economic system, question its relationship with legal tender and the role of Central Banks and finally question existing power relations through debt and investment that CC’s could shake with unknown consequences. Christopher Place, for example, questions the impact of an intervention, even if well intentioned by the Central Bank: “Nevertheless, as community currency innovation and circulation stability totally depends on a democratic management system, would the possible control from the Central Bank of Brazil finally destroy this creativity through homogenisation and standardization?” (Place, 2011). Marc Brakken suggest that “complementary currencies be treated as complementary and either established as non-competitive with dominant currency structures or seek to be competitive in different modes by redefining sets of relationships. (. ) The national currency is better optimized for the economic context within which it operates. It helped define that context. Changing only the scale of exchange is insufficient.” (Brakken, 2012). Others claim for CC’s to drop the complementarity and assume the alternative in a process of amending the economic and sociological concept of money, itself an agenda to ‘re-programme money’ and re-define its symbolism (Thiel, 2012). The middle stand is the one that defends monetary diversity connected with stability, resilience and sustainability where multiple currencies co-exist and intertwine with each other across different functions, stakeholders and scales. However, the sample here researched did not offer any clear insights into what monetary plurality means regarding the optimal number of currencies, the exchange mechanisms between multiple currencies across scales, the competing consequences of monetary pluralism, limits and costs for complex monetary systems, among many other inquiries. We may argue that the CC field is not mature enough, scientifically speaking, or articulated enough to endure such intellectual and practical challenges but reality is catching up very fast in many CC projects and this particular set of questions will be pressing on the agenda of practitioners and researchers in the near future. For the time being and considering research patterns in this sample we’ve found a growing interest in appropriate design of CC’s and in understanding the concrete impacts of different design choices in the success of complementary currency projects. Some design elements of CC’s are presented and discussed, such as the impact of demurrage in the velocity of circulation for example, but in most cases the results are inconclusive, confusing or even counter intuitive as in the case of Hugo Goldschalk: “Demurrage probably does not matter if the usage, turnover and velocity are the benchmarks; The main driver behind higher level of circulation of CC is probably Gresham’s law: Bad money drives out good money.” (Goldschalk, 2012). Damjan Pfajfar paper, also in 2012, defies some beliefs and perhaps naive views when stating: “We have, first, found that measures of monetary stability (such as inflation, money growth and inflation volatility) are negatively related to the likelihood of ACC adoption. Second, we have found that measures of financial sector development (such as domestic credit, number of bank branches and non-performing loans) are positively related to ACC’s. Our final key finding is that overall developments of economic development (GDP per head and GDP volatility) are positively related to ACC’s. This suggests, contrary to what one may have expected, that alternative currencies do not act as a substitute for fiat money.” (Pfajfar, 2012). These counter intuitive conclusions, found in the IJCCR post-recession literature regarding the design of complementary currencies, represent, for us, a call for a new phase in CC research focused more on understanding complex economic exchange systems, their design and its socio-economic impacts and finally complementary currency acceptance and use in different cultural contexts. As highlighted by several authors CC success in the end is a matter of identity positioning, community acceptance, regular reciprocal use and socio-economic concrete, visible and recognizable impact. If a complementary currency is not useful for the community it won’t last; if it’s not trusted, it won’t last; and if its badly designed in its key assumptions it won’t last as well. Hélène Joachin and co-authors summarize: “Firstly, designers of the project have to decide about the manner to motivate people to get on-board (motivation to participate), then design the functioning of the system accordingly (operations) and then choose the parameters for the currency itself (currency)”
All those choices are interrelated and create mutual dependencies. For some authors, the response for these multiple, complex and uncertain challenges is ‘Democratic Money’ or participatory currency governance, i.e., re-embedding currency decision-making processes in community life. Once again, the path might be inviting and logic but the road not so easy to drive in, as Shira Jones points out: “Currency stakeholder, including external regulators, internal decision-makers and currency users, are affected by currency governance, but there exists no clear model for what shared decision-making among all stakeholders might look like.” (Jones, 2011). Still and as Shira Jones also concludes in another paper, some governance principles for sustainable currency governance can be extracted from the existing literature: “consistent regulatory framework treatment, transparency, accountability and participation as applied to all stakeholders who are affected by monetary functionality” (Jones, 2011). To these, Skylar Brooks adds social and environmental principles stating that “monetary systems do affect the natural environment. They do so by promoting economic activities that have real, often deleterious, environmental consequences. (...) Regardless of how monetary systems are governed, they can be governed according to social and environmental, rather than strictly economic, principles. As such, monetary governance arrangements can be designed to promote environmental behaviour.” (Brooks, 2015).

Returning to the beginning of these section and based on the conclusory remarks from our universe of articles, we might add that the stakes are high for CC’s practice and research into the future. The necessary dive into the complexity of monetary systems in diverse and changing socio-economic and cultural contexts with multiple risks, scales and iterative interactions will require new methods for economic analysis, more in-depth research, more transdisciplinary approaches, more diverse case studies, better comparability between cases and more articulation between researchers, between researchers and practitioners and also with policy makers and decision makers at all levels.

3.4 Research gaps

Contrary to what could be expected in scientific articles specifically in new or under researched fields, 60% of the publications in our universe did not explicitly call for more empirical tests, experiments or trials, and almost half (48%) did not call for more or deeper research. While the reasons for this are beyond the scope of this paper, no explanatory variable was found within our set of data collected. Nevertheless, from the 52% that did mention the need for more research and clearly stated the research gap and/or a future research agenda, four clusters can be identified: Impact assessment; appropriate design; sustainable governance; and better and wider data across scale, stakeholders and economic sectors.

Concerning the impact assessment gap, several authors make the call not only for better and more consistent methods, indicators and proxies, but also for longer periods of analysis across multiple scales, and for cross-checking with other socio-demographic and economic data from the region or country of implementation. The effectiveness and real economic impact of CCs is regularly questioned in the sample both from a micro and macro-economic perspective. A recent paper from Place and Bindewald (2015) aims at filling this gap by proposing a coherent methodology – The Theory of Change supported by the Impact Assessment Matrix – for the impact assessment of CCs. Less present in the literature analysed are calls for more impact assessment of CCs in official money markets and the wider monetary system. However, there is a clear trend for this topic to become more central as CC experiments grow in number, users and scale. A tipping point is the growing number of municipalities issuing their own CC, which will potentially attract the attention of Central Banks and other institutional bodies in the near future.

This brings us to another research gap present in the sample, which is the need for more cross-sectorial, multi-disciplinary, multi-scale data analysis and stakeholder engagement. Many authors identify the need for wider data collection and analysis – temporal, geographical, socio-demographic and economic – that can be compiled, compared and made useful in improving the design of CCs and the complementarity between existing currencies. Following that, a need to research deeper and wider into exchange hubs for multiple currencies as these have become important nodes of confluence and meeting points with new and complex challenges is also identified in the sample. We may conclude that more than single case-study short-lived empirical research – which as we have seen represents half our sample - there is a concrete aspiration for longer timescales, better indicators, more comparable data and integrating monetary complexity.
Regarding the cluster ‘appropriate design’, there is a wide variety of research needs that concern the fit between purpose, functionality, financing, scale and design elements of each CC and its sustainability, resilience and effectiveness. Several authors ask for more research into the appropriate design of each typology of CC according to its objective and context, among other important elements. More recent papers have started to systematically analyse certain CC features, for example CC financing options discussed by Schroeder (2015) or the factors influencing the velocity of circulation by De la Rosa and Stodder (2015), but the need for more research into the fundamental issues of appropriate design of CC it is still widely recognised.

Finally, a cluster that is not widespread but rather characteristic of a small number of authors who recurrently bring the subject up is the issue of CC governance. Not only the question of how different models of governance impact the effectiveness and viability of a CC, but also how to measure its sustainability, coherence with the objectives and the most appropriate model of governance for each specific socio-political context. Once again, the research gap here is across scales, from the micro scale of CC governance at the community level, to the meso scale of regional currencies and international exchange hubs of multiple currencies, to the wider macro scale of the capitalist economic system and the governance of monetary systems.

Although many other research gaps are identified, for example regarding the cultural and symbolic impact of CC experiments, the psychological and sociological factors that affect and condition CC acceptance and success or the effectiveness of CC literacy investments, we believe that the above-mentioned clusters represent the critical mass of important topics to feed into future research agendas in the IJCCR.

4. IJCCR BEYOND 2018: FILLING IN THE GAPS AND CORRECTING THE BIASES?

In this paper we have mostly looked into the past and therefore we would like to conclude with a note into possible futures. The International Journal of Community Currency Research aims to “provide a common forum for informed articulation and debate of empirical, critical and theoretical research on community currencies.” bridging the gap between currency ‘activists’ and ‘academics’ and making CC research freely accessible to all. Although a clearer research agenda can only be found in the specific call for papers in IJCCR co-organized international conferences, we argue that in face of the results presented and the long track of IJCCR in the past decades, a new research agenda beyond 2018 might prove to be useful and successful in directing academics and practitioners not only to fill the research gaps and correct some of the biases identified but mainly to invite new research that effectively complements existing knowledge and pushes our understanding of complementary currencies into new realms. This explicit and intentional research agenda would actively promote co-authorship and more collaboration within the field, invite new authors from under-represented geographies or realities, embrace and strengthen new research methodologies, encourage multi-case study and longer-term research as well as promote the use of more economic and monetary modelling. On the other hand, this new research strategy should highlight hot topics within CC research, the key research questions alive in the field as well as theoretical hypothesis unattended and research gaps to be filled. Some of these have been mentioned in this paper as a result of our analysis, specifically the four clusters identified regarding research gaps that we believe that should be prioritized: i) Appropriate design of CC; ii) interexchange mechanisms and platforms in multiple currency systems; iii) Monetary governance; iv) impact assessment metrics and frameworks. We acknowledge the fact that scientific articulation, coordination and cooperation is not a simple task and the balance between scientific articulation and scientific freedom is a fine thread to walk in. Nevertheless, we hope that some of the questions, clusters and patterns identified in this paper serve as an invitation for the scientific community working in this field to consciously (re)consider and (re)prioritize co-developing a common research agenda beyond 2018.

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