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A bibliometric analysis of the scientific literature on Fairtrade labelling

Running head

Fairtrade labelling

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Abstract

Since its foundation, the Fairtrade movement has attracted the attention of consumers, practitioners, media and scholars. Discussing the role that Fairtrade can play on a global yet locally rooted scale is very complex, as research reports contrasting results about its

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usefulness and effectiveness. This study examines scientific research on Fairtrade over the last decades by conducting a bibliometric analysis of the literature published on the ISI Web of Knowledge Core Collection, which included 876 papers by 1,293 authors in 432 journals. Results show that despite this being a relatively recent field of study, Fairtrade has been approached from different disciplines with different methodologies and objectives. The structured quantitative study of the literature enabled us to inspect how research has evolved over the years in the light of the changes faced by Fairtrade, to explore its scope in the broader field of the global market, to detect current research schools and perspectives within the network and to identify hitherto unaddressed issues and unconnected subfields.

Keywords: Fairtrade, Fair Trade, Bibliometric analysis, Co-citation, Bibliographic coupling

1. Introduction

Fairtrade (FT) is a product certification and labelling system that seeks consumers' recognition through quality labels and public and/or private certification (Renard, 2005), by standardizing and unveiling the conditions of production (Naylor, 2014). The concept that underlies FT certification is quite simple: relying on consumers' willingness to pay (WTP) for products with a higher ethical content, FT imposes more equitable conditions of production and trade over certified products, in order to improve working conditions and empower small farmers and hired labourers (Raynolds, 2012; Krumbiegel et al., 2018).

Today, FT encompasses 1.65 million farmers and workers, organized in more than 1,200 producers' organizations, spread across 74 countries worldwide, producing goods that are sold in over 125 countries through different types of distribution channel (Fairtrade International, 2017). There are over 30,000 FT certified products on sale worldwide and there are standards for both food and non-food products.

The true significance of FT might not lie in its market share but in its ability to create new links between producers in the south and consumers in the north (Raynolds, 2000, 2002; Low & Davenport, 2005), as FT sales grew by 27% in 2009-2010, 21% in the following two years and 15% in 2012-2013, passing from a total turnover of 3.4 billion euros in 2009 to 5.5 billion euros in 2013 (Fairtrade International, 2012, 2015). More recently, global sales of FT certified products have grown further from 7.3 million euros in 2015 (Fairtrade International, 2016) to 7.88 million euros in 2016 (Fairtrade International, 2017). Most of the sales are concentrated in the US, UK and Germany but many new markets are expanding rapidly and have already achieved significant sales (Fairtrade International, 2017).

One of the most interesting aspects that stands out when it comes to Fair Trade is the dynamism that has characterized this movement from its inception birth until the present day, and the strategies that the movement has adopted to respond to the changing conditions of global exchange over the years (Shreck, 2005; Jaffee, 2007; Reed, 2009). Nevertheless, FT success and growth worldwide has depended primarily on two turning points: the introduction of formal labelling initiatives, launched in Europe in 1988 (Raynolds, 2002; Renard, 2005; Bacon, 2010; Doherty et al., 2013), and the increasing involvement of corporations in FT, in what has been described as a mainstream strategy, during the 1990s.

Since then, the FT label can be found on the packaging of products produced by large multinationals sold in supermarket chains as well as on productions performed on a small scale and sold through alternative shops or dedicated mail order (Reed, 2009; Méndez et al., 2010; Doherty et al., 2013; Moore, 2004).

Fairtrade (FT) is not a new subject in academic literature: starting from the 1980s it has attracted the attention of scholars from a wide range of disciplines, including economics, marketing, design, agriculture, rural studies, development studies and theology (Moore, 2004).

On the basis of the large bibliography of scientific researches that have analyzed FT over the years in which the movement has developed and evolved, a structured quantitative study of the literature can help (i) to explore the scope of the FT in the broader field of global market over time, (ii) to detect the most influential articles that have been at the base of the research, (iii) to detect current research schools and perspectives within the FT and (iv) to identify unaddressed issues and unconnected subfields. Accomplishing these goals will substantiate evidence from field studies and literature reviews of the FT and help cross-validate their findings and assessments.

Although there have been several reviews dedicated to the topic of FT, none of them provides a comprehensive analysis of the FT scientific literature through bibliometric tools. Furthermore, previous reviews focus only on research on specific aspects one at a time, rather than addressing the research in its entirety. For example, Andorfer and Liebe (2012), Grankvist (2012) and Straight (2013) focus on individual consumption of FT certified products, while Le Mare (2008), Nelson and Pound (2009), Terstappen et al. (2013) and Krasnozhon et al. (2015) focus on the social and economic impact of ethical certifications on producers. McArdle and Thomas (2012) analyze gender empowerment within the network of FT producer organizations, while Parvathi and Waibel's study (2013) proposes an analysis of the opportunities and constraints regarding organic and FT certified production in developing countries. Barros et al. (2015) use bibliometric methods only to employ a performance analysis, not a comprehensive science mapping, on the literature concerning FT, which was also produced for the purpose of this study and is reported in the third section. It is worth noting that not all the mentioned publications are indexed in scientific libraries such as Scopus or Web of Science, as some of them fall into the category of grey literature.

The present paper attempts to analyze and critically appraise the literature on FT by means of the methodologies and instruments provided by bibliometrics. Our analysis makes an important contribution for scholars interested in the study of FT, as it provides a quick reference guide for interdisciplinary researchers as well as marketers who want to know how the FT movement has been addressed by scientific research over the years. We identify the main countries, institutions, journals, authors and articles in this research area, and then outline the structure of research on FT over time, synthesizing the main streams through the use of citation-based networks.

2. Method

2.1. Bibliometric analysis

The methods followed in this paper are rooted in bibliometrics (Garfield, 1955; De Solla Price, 1965; Small, 1973) which consists of a set of methods that can be employed to evaluate research through statistical analysis of bibliographic data, commonly focusing on citation analysis of research outputs and publications. Bibliometric covers two main categories of analysis: performance analysis and science mapping (Noyons et al., 1999; Moed et al., 2005;

Van Eck & Waltman, 2014). The first category aims to evaluate actors (mainly authors, institutions, journals and countries) on the basis of bibliographic data. The second category, science mapping, is a spatial representation of bibliometric networks to explore the interrelation between disciplines, fields, specialties, individual papers or authors. There are several bibliometric techniques that have been developed over time to build a science map (Small, 2006), the most commonly used being documents co-citation and bibliographic coupling analysis (Cobo et al., 2011). In bibliometrics, citation counts are assumed to generally reflect the resonance of a paper in the scholarly community in an objective and measurable way.

2.1.1. Co-citation

Co-citation analysis (Marshakova, 1973; Small, 1973; Small & Griffith, 1974; Small & Crane, 1979) is a bibliometric technique proposed by Small (1973) that aims to map the structure of a research field through the analysis of groups of documents that are commonly cited together (Cobo et al., 2011). Two documents are said to be co-cited when they both appear in the reference list of a third document; the more papers they are both cited by, the stronger their association. The major drawback of co-citation analysis is that it is regarded as an approach biased towards 'the past' of an academic field, as it is more likely to capture older contributions and well established scholars rather than the forefront of the research (Van Eck et al., 2013; López-Fernández et al., 2016). Not surprisingly, this technique is used to provide a comprehensive historical view of the intellectual structure of a specific field of study. The co-cited papers in each cluster tend to share some common themes and they are considered to represent the core knowledge base of a research area: the key concepts, methods, or experiments that researchers build on (Small, 1980). Co-citation analysis allows the exploration of dynamics of scientific development and conceptual shifts of a specific subject (Small, 1973).

2.1.2. Bibliographic coupling

Bibliographic coupling can be interpreted as the opposite process to co-citation: two publications are said to be bibliographically coupled if there is a third publication that is cited by both publications (Vladutz & Cook, 1984; Glänzel & Czerwon, 1996; Jarneving, 2007). Bibliographic coupling analysis assumes that when two papers show similar bibliographies, they are likely to represent the same or at least related research topics. To overcome the "backward looking" of the co-citation analysis we used the bibliographic coupling technique to highlight the FT recent trends. The threshold for the minimum shared references between coupled publications was set to 10 to eliminate very isolated nodes.

The larger the number of references two publications have in common, the stronger the bibliographic coupling relation between the publications (Van Eck & Waltman, 2014). Bibliographic coupling is about the overlap in the reference lists of publications, thus focusing on the association between two citing publications (Van Eck & Waltman, 2014). One advantage of bibliographic coupling, compared to co-citation analysis, is the absence of restrictions on frequently cited papers. Therefore, the results of bibliographic coupling do not depend on the moment in which the data are collected, and since documents that include citations are more recent than the documents they cite, this method is suitable to investigate more recent contributions.

2.2. Mapping and clustering strategy

Since our intention is to focus on both past and present research, we have chosen to jointly apply co-citation and bibliographic coupling on the body of scientific literature dealing with FT, in order to combine the insights provided by the two techniques. Both co-cited and coupling linked articles are assumed to form groups of publications that represent the same or at least related research topics, and both techniques aim to detect groups of publications that share a common intellectual background.

The co-citation procedure is constructed as follows. From the reference lists of the set of publications, documents that are cited more than a specified threshold are coupled according to how frequently the pair co-occur in the reference lists. Conversely, documents that share more than a specified threshold of references are selected to construct the bibliographic coupling network, where the number of shared references represents the coupling strength between them. To produce empirical readable maps of prominent research in the academic discipline, only papers that received at least 20 citations were used for the co-citation network; papers with at least three citations were used for the bibliographic coupling network. After the normalized networks have been computed, the next step is to position the nodes in a two-dimensional space in such a way that strongly related nodes are located close to each other, while weakly related nodes are located far away from each other. Documents skimming, the extraction of the cited literature, and the creation of the co-citation and coupling matrix of references were computed through the software Bibexcel, and then processed in the software VOSviewer for mapping and clustering. Starting from a correlation matrix, VOSviewer constructs the map by calculating a similarity matrix based on the co-occurrence matrix, then the VOS mapping technique is applied to the similarity matrix. The criteria used by VOS is to minimize the weighted sum of the squared distances between all pairs of publications, weighted by the similarity between them (Van Eck & Waltman, 2010). The VOS mapping technique locates publications in a low-dimensional space in which the distance between any two items reflects the similarity or relatedness, then cited documents are aggregated in clusters by sequentially linking together all selected pairs of cited documents. These clusters represent the intellectual base of the different subfields of research.

2.3. Searching strategy

The bibliographical data gathered in this study were collected from Thomson Reuters' ISI Web of Science (WoS). In order to ensure the highest quality of the document sample, we downloaded articles from the "Core Collection" covering the period 1985 to 2017. Moreover, WoS has been used across a wide range of scientometrics studies and the main software of bibliometric analysis is set up for it (among others, see Di Stefano et al., 2010; Appio et al., 2014; Fetscherin and Heinrich, 2015; Fiala and Tutoky, 2017; Gurzki and Woisetschläger, 2017). We have used as keywords the terms "fairtrade" and/or "fair trade" in the field Topic, which contains titles, abstract and keywords. The choice to use quotes in the search is motivated by the different meanings that the two terms "Fair" and "Trade" may assume when taken individually (e.g. trade fairs). Another factor that may affect the data is given by the WoS Keyword Plus, which is based on the bibliography and automatically generated through an algorithm and therefore may be inconsistent with the terms of the search (Garfield & Sher, 1993). For these reasons, coherence with the subject matter of the resulting 1,162 portfolio of papers has been verified by reading the titles, and in some cases the abstract and articles as well. Through this (tedious) process, 286 documents have been removed from the database, leading to a final dataset of 876 documents. Data were collected in November 2016, after which the database cleaning process to ensure consistency with the topic, the creation of clusters and especially the analysis of the papers, took a time ranging from 9 to 12 months. However, it should be mentioned that these types of networks, which represent the structure of the research based on the references, are slow to change and it takes time before more recent publications appear in the clusters due to citation lag.

2.4 Data

Table 1 and Figure 1 present several characteristics of the FT publications between 1985 and 2015. The study of the number of publications and authors reveals the growing interest in this subject. In more detail, FT has become a real subject of studies since 2005: even though the earlier documents are dated back to 1985. From 2005, all these parameters show a growing trend that culminates with a maximum reached in 2010; from the following year a short slowdown is noticed, immediately followed by a steady increase over the following five years that has lasted until today.

It is worth noting that the increase of FT-related publications from 2005 coincides with the end of a period of radical changes in the coffee market, which still represents the most important fair-labelled product, both in terms of sales volume and number of countries involved. Keeping in view this temporal distribution of scientific production on FT, Figure 1 also shows that the most cited works are concentrated in a time span ranging from 2004 to 2010.

3. Results

This section discusses the findings of the quantitative analysis of the articles that compose the database.

3.1. Mapping representation

From 1985 to 2015, universities from 72 countries have contributed to FT research: the USA has always played a dominant role with almost 25% of the total publications, followed by the UK (17%), Canada (6%), France (6%), the Netherlands (5%) and Germany (4%). The 15 most productive countries and institutions are displayed in Table 2a and Table 2b. The leading position of the USA and UK in FT literature (see Table 2a) is also evident through the analysis of the most active institutions and organizations: among the top 20 most productive institutions, the USA occupies the top four positions out of 20, and the UK occupies nine positions out of 20. The positions of leading European university and research centres for publications regarding FT belong to Wageningen in the Netherlands, followed by Rome in Italy (see Table 2b).

Figure 2 shows the cooperative relationships among the top 20 productive countries in the FT field of research from 1985 to 2015. Since one of the main purposes of FT is to foster the rights and living conditions of the inhabitants in the developing countries, for this reason, one might expect a great collaboration with institutions and researchers in disadvantaged countries. Conversely, with regard only to the academic world, the involvement of local universities and institutions is missing. Collaborations between countries and institutions concern countries of the so-called Global North, the USA and UK being the main cooperative countries. Anyway, this does not mean that FT research has a weak or no relevance to the countries of production, as many studies are based on collaborations with producer cooperatives and local organizations.

FT appears to be a multidisciplinary research area. This feature can be observed both through the analysis of subject categories and the main sources that publish the documents that compose our database. The key disciplines of the data are Business & Economics (31%), Agriculture (14%), Social Sciences (13%), Public Administration (12%), Environmental Sciences (11%) and Geography (9%). A total of 432 journals published pertinent literature on FT research all over the world during the period between 1985 and 2015. More than 35% of articles on the database appear in the 16 journals listed in Table 3. Overall, economic journals, especially those with a focus on development and ethical issues related to business, dominate the lists of the most influential journals in the research of FT. However, research on the subject seems to be rather fragmented with regard to the sources, and only the Journal of Business Ethics has a considerable number of publications, accounting for almost the 10% of the dataset.

3.2. Document co-citation analysis results

Document co-citation analysis examines the network of co-cited references and is used to map the underlying intellectual structure and dynamics of a field of study (Braam et al., 1991). The results of the top authors and papers in terms of citations are reported in Tables 4 and 5. Despite the number of citations not necessarily indicating the quality of a paper, it is a reliable proxy of its impact or visibility. The top five publications with the largest citation nodes are Bacon (2005), Jaffee (2007), De Pelsmacker et al. (2005), Renard (2003), and Raynolds 2002, indicating that these are the most frequently cited articles in FT research.

Figure 3a and Table 6 show the entire network of articles' co-citation analysis. The greater the size of the label, the greater the number of citations within our set of publications, references that are more likely to be cited together are closer each other. Labels are coloured according to cluster identity.

Using a single linkage clustering performed by the software Vosviewer, four clusters have been identified, including respectively 33 papers in cluster 1, 28 in cluster 2, 25 in cluster 3 and 16 in cluster 4. In addition, Figure 3b pinpoints the high impact of documents in terms of co-citation strength and citations received, in order to improve the readability of the co-citation network.

3.2.1 Cluster 1 – Theoretical foundations of FT

Documents in the first cluster theoretically ground the foundations and principles on which FT is built. Articles of the first cluster provide an overall overview of FT from its origins to its current forms, tracing its history (Renard, 1999, 2003; Raynolds, 2000), explaining its organization (Renard, 2003) and identifying how it developed and grew as a social-quality market niche in a context characterized by agro-food market saturation, concentration of industry and trade, industry's expanding influence in the definition of quality, and homogenization of food practices (Renard, 1999; Raynolds, 2000). Drawing on convention theory (Raynolds, 2002; Renard, 2003) and commodity chain tradition (Raynolds, 2002), the dynamic nature of FT is unveiled, showing how FT movement has been always shaped by recurrent tensions, contradictions and compromises within the multiple levels of the network. FT was born as a solidarity and charity model, but later switched to a partnership model (Tallontire, 2000; Raynolds, 2002) by means of a strategy that has often been summarized in the slogan "trade not aid". Later on, FT shifted from alternative trade selling channels – based on direct connections between consumers and producers – to mainstream retailers worldwide, and in more recent times the certification – that was once prerogative of cooperatives – has been extended to some plantation products (Renard, 2005; Reed, 2009).

Several papers of cluster 1 try to define the very nature of FT which contains a basic contradiction (Renard, 2003), summed up in the phrase "in the market but not for it" (Taylor, 2005) or "in and against the market" (Barratt Brown, 1993).

Documents in the first cluster are, for the most part, explicitly related to FT, but there are also interesting exceptions such as Ponte (2002), Gereffi et al. (2005) and Ponte & Gibbon (2005), which significantly contributed to the methodology that underpins most studies in the global commodity chain.

3.2.2 Cluster 2 – Analysis and Criticism of FT integration in the mainstream market

The second cluster can be interpreted as a further step towards a more detailed analysis of FT in the context of the free market. In particular, the consequences and challenges posed by mainstreaming strategies and shifting power relations within the fair-labelling network are addressed (Moore, 2004; Low & Davenport, 2005; Hira & Ferrie, 2006;).

The main issues posed by corporations' involvement are represented by the risks of marginalization of the original FT mission and principles (Low & Davenport, 2005; Nicholls & Opal, 2005), being absorbed by the market mindset (Low & Davenport, 2005; Taylor et al., 2005), being exploited by big corporations engaged in image-laundering processes (Renard, 2003; Moore, 2004), and by the loss of interest and trust in certifications by consumers, as well as producers (Nicholls & Opal, 2005; Raynolds et al., 2007; Reed, 2009).

The papers in this cluster analyze the competition between FT and competitors, which mimics some of the aspects of FT production, and through the use of rival third party certification systems (Murray & Raynolds, 2000; Raynolds, 2000; Moore, 2004; Reed, 2009). Frequently, these competitors are those entities that Raynolds defines as "(Those who) hold the bar on social and environmental conditions", as they usually have much less rigorous social standards or are not interested in continuous improvement of standards (Raynolds et al., 2007, p. 159).

The second cluster treats other criticisms concerning corporation involvement related to governance and power issues within the FT network: (i) the need to create a wider consumer base with increased consumer awareness and better understanding of FT (Moore, 2004; Nicholls & Opal, 2005; Hira & Ferrie, 2006), (ii) the shifting power relations within the FT labelling network in favour of big companies and retailers (Raynolds et al., 2004, 2007; Low & Davenport, 2005; Renard, 2005), and (iii) the lack of agreement over definitions of standards and certification procedures (Hira & Ferrie, 2006).

Barratt Brown (1993) and Nicholls and Opal (2005) recognize the magnitude of the FT in reversing the damages created by the market through instruments offered by the market itself. Barratt Brown (1993) argues that only through the support and intervention of international institutions on market regulation will these forms of trade continue to expand, to the point that he proposes the establishment of "a new economic order composed of democratically controlled state marketing boards with grassroots control at all levels, and direct links between Northern consumers and Southern producers" (Fridell, 2007b, p. 47). On the other side, Nichols and Opal (2005, pp. 13–31) describe FT as "a consumer-driven phenomenon", "a neoliberal solution to problems with trade", "entirely a consumer choice (based) model", that "operates within the larger free trade model of unregulated international commerce". Emphasis on centrality of consumer demand and consciousness reflects the evolution of the practices of FT, as it shifted from being a proposal of an alternative system to the neoliberal political economy, to a form perfectly integrated in the context of the free market (Nicholls & Opal, 2005; Guthman, 2007).

3.2.3 Cluster 3 – Consumers

Documents of the third cluster focus on the consumer side from different points of view, such as marketing, geography, sociology, economy, etc. Studies in this cluster cover a wide range of aspects over FT consumption as they include both theoretical researches and experimental studies (see Table 6 continuation). Indeed, the complexity and diversity of the factors that contribute to the formation of consumers' attitudes and preferences towards FT products make it necessary to use a wide spectrum of investigation in order to fully understand the mechanisms that underlie consumer choices (Shaw and Clarke, 2006).

It is worth noting that the most co-cited documents in the network belong to the branch of studies that uses economic approaches to examine whether or not consumers care about ethical issues, and whether consumers are receptive or not towards ethical certifications. These researches mainly used the WTP of consumers as a meter of judgement and offer encouraging results about the effectiveness of ethical labels. The major findings reveal that despite FT advocates being only a minority in the global scenario, the majority of consumers are very receptive towards ethical labels (De Pelsmacker et al., 2005), as they say they are willing to pay higher premiums, even higher than for organic products or other kinds of certifications, such as shade grown coffee and organic coffee (Loureiro & Lotade, 2005).

One of the recurring topics between documents in the third cluster lies in the debate about the limitations of the traditional survey methods in consumer research, and the consequent call for the adoption of methods that can lead to reliable conclusions. As argued by Auger and Devinney (2007), results from surveys are very likely to overstate the importance of ethical issues and add spurious information into the measurement process. Studies drawing on economic approaches have used several methods to obtain trustworthy empirical insights on FT consumption, such as conjoint analysis (De Pelsmacker et al., 2005), contingent analysis (Loureiro & Lotade, 2005), natural field experiments (Arnot et al., 2006), choice experiment (Auger et al., 2003) and quality approaches (de Ferran & Grunert, 2007). These considerations are very important in the study of FT consumers and ethical consumption, as they fit into the debate the need for new approaches that can address an issue inherent in a field that is "studying issues with inherent methodological complexities that make understanding human behavior even more difficult than normal" (Auger & Devinney, 2007).

Past research has emphasized the crucial role that information plays in promoting the awareness and sensitivity of consumers to ethical issues, pointing out that in order to unfold accurate decisions, consumers should be fully informed (Carrigan & Attala, 2001; Barnett et al., 2005). However, it is argued that such a theoretical approach could lead to a distorted understanding of reality, as it generalizes and trivializes the hierarchies of values that guide consumer decision-making processes and their moral selfhood (Barnett et al., 2005).

Other studies in the cluster inspect different aspects of FT consumers, such as sensitivity to price changes for consumers of FT coffee (Arnot et al., 2006) or the role of religion in FT consumption (Doran & Natale, 2011).

3.2.4 Cluster 4 – Producers

The documents of the last cluster focus on the impact of FT on producers and on the evaluation of its effectiveness in improving the well-being of small-scale farmers (see Table 6 continuation).

If the long-term success of FT depends largely on consumer choices (Lyon, 2006), producers' commitment to FT and their understanding of its principles remain two key elements to ensure their participation and commitment in the long term, and to achieve the "democratization of producers' organizations" fostered by FT (Murray et al., 2006). The risk that producers will turn to FT only in case of very low market prices, and then abandon it in more prosperous times, threatens the viability of FT in the long-term (Nicholls & Opal, 2005; Lyon, 2006; Murray et al., 2006).

Claimed benefits for producers to join the FT network are represented by guaranteed minimum price, pre-financing and long-term contracts, and price premium to be invested in the development and support of the community of producers (Taylor et al., 2005). FT strengthens the organizational capacity of producers, providing greater financial and organizational stability. It bolsters economic security and stability of producers' communities (Raynolds et al., 2004) and infrastructural investment capability, improves livelihood and administrative capacities, and increases the level of cooperation and political influence (Raynolds et al., 2004; Bacon, 2005; Murray et al., 2006; Arnould et al., 2009). Through participation in FT, producers acquire skills and knowledge that they can use also in non-FT markets.

Scientifically demonstrating any positive impact of the FT programme on producers and their communities is definitely one of the most challenging aspects of FT research. This ambitious goal is made more difficult by the fact that producers sell their products in multiple markets, leading to greater difficulties in identifying the effects of participation in the FT on household incomes (Bacon, 2005; Calo & Wise, 2005; Bacon et al., 2008; Valkila, 2009).

Findings from the empirical studies in the network generally converge in supporting the positive impact of FT participation for producers in terms of income (Raynolds et al., 2004; Bacon et al., 2008; Arnould et al., 2009), while assessments in terms of social indicators such as education, health (Raynolds et al., 2004; Becchetti et al., 2006; Bacon et al., 2008; Arnould et al., 2009), individual and collective empowerment and capacity building (Raynolds et al., 2004) and environment (Bacon et al., 2008) are slightly more uneven.

In the words of Arnould and Bray, FT "is not a panacea" for third-world poverty (Arnould et al., 2009; Bray et al., 2002, p. 442), as some producers remain in poverty despite being connected to FT markets, and FT will have to constantly face new challenges to succeed in its mission (Bacon et al., 2008).

3.3. Document bibliographic coupling analysis results

The full bibliographic coupling network (see Figure 4a) is composed of three clusters and its structure is quite similar to the one observed in the co-citation network. In addition, Figure 4b highlights the high impact articles in terms of coupling strength and citations received in order to improve the readability of the bibliographic coupling network.

Many of the most prominent authors of the co-citation network are also represented in the bibliographic coupling network, revealing a high level of specialization and experience of FT researchers. Differently from the co-citation analysis, bibliographic coupling reflects the different changes in the FT concept. Scholars have formalized definitions of FT and set up independent governance and monitoring organizations to oversee FT supply-chain agreements and the licensing of participants (Doherty et al., 2013). Indeed, the rapid expansion experienced by FT in recent decades has introduced new compromises and tensions, and has exacerbated some of the existing ones (Raynolds, 2012).

3.3.1 Cluster 1 – Evolution and challenges of FT

Despite the relatively heterogeneous body of literature that composes the first cluster, the analysis of the documents reveals that the central debate around the foundational and practical aspects of FT is still inevitably closely linked to the mainstream strategy and its consequences.

The rise in public awareness and the positive relationship between the adoption of the mainstream strategies and expansion of the FT market are proposed as clear examples of the success of FT in the last decades (Davies & Ryals, 2010; Raynolds, 2012; Doherty et al., 2013). However, there is an extensive literature inspecting the negative impacts of corporate engagement in the FT network (Jaffee, 2012; Doherty et al., 2013; Child, 2014).

Drawing on previous works on the global value chain model, Doherty et al. (2013) assess the degree of risk for dilution, co-optation and reputational damage for the different types of value chains which make up the vast majority of FT purchases today. In doing so, they emphasize the need for researchers to consider the heterogeneity of the FT movement, which is composed of many different forms of organization that should not be considered as a single entity.

The growing supply of products with ethical content, which has resulted in increasing number of ethical brands by firms or retailers (Doherty et al., 2013), as well as the nearly total integration of FT in conventional international markets (Naylor, 2014), renders obsolete the narrative of FT being "in and against the market". Naylor (2014) debases this paradigm as an "illusion of an alternative economic imaginary", while Jaffee and Howard propose the recent developments within the FT network as an example of the risks about the limits of voluntary and non-state regulation, and of the consequences of "growth at any cost" strategy (2010, p.395).

It is also argued that consumers have lost that sense of political and collective action that motivated them in the early stages, i.e. during the 90s, to explore new ways to increase the number of FT consumers (Doherty et al., 2013).

Naylor (2014) challenges the dominant theoretical approach that underlies the FT movement and the research on this subject, meaning the dichotomy of "southern producers" vs. "northern consumers", as it perpetuates and reinforces, on a semantic level, the same disparity in power that FT seeks to equalize. FT research needs to re-think approaches that can more fully capture the heterogeneous group of FT actors who have different needs, interests and positions.

3.3.2 Cluster 2 – Consumption

Documents of the second cluster of the bibliographic coupling network deal with FT consumption. The research results confirm the need to overcome the dualistic narrative between pragmatic and radical consumers by giving greater attention to consumers' heterogeneity and facets (Cranfield et al., 2010; Kim et al., 2010; Andorfer & Liebe, 2012).

Heterogeneity of consumers is addressed both by comparing samples from various countries or cities (Cranfield et al., 2010; Kim et al., 2010), and widening the spectrum of the products analyzed, by investigating product categories other than coffee (Kim et al., 2010; Davies et al., 2012). Previous studies on FT coffee provide limited focus with little generalizability, compared to the wide range of certified products (Kim et al., 2010). To fill this gap, in recent times scholars have been exploring areas that have traditionally been poorly investigated by research, such as utilitarian product categories (Kim et al., 2010), luxury goods (Davies et al., 2012) and the business-to-business context (Salvador et al., 2014).

People tend to overstate the amount they are willing to pay when asked hypothetical valuation questions compared to when their actual money is involved, so that the hypothetical methods can lead to values two to twenty times greater than non-hypothetical valuation methods (Lusk & Shogren, 2007). Therefore, intentions should not be considered a reliable proxy for actual consumer behaviours (Carrington et al., 2010; Andorfer & Liebe, 2012).

Since we should draw our conclusions from what people do, rather than from what they say, what is actually needed is an approach that combines the advantages of revealed and stated preference methods and is able to separate what people say from what they pay, i.e.

using incentive compatible methods that provide incentives for individuals to truthfully reveal their values and impose a cost for non-truthful (or inaccurate) value revelations (Lusk & Shogren, 2007; Carrington et al., 2010; Andorfer & Liebe, 2012).

3.3.3 Cluster 3 – Producers

Documents of the third cluster focus on aspects related to the impact of FT certification on producers. Most of the researches rely on experimental case-based studies, reporting very modest or no effects on income, and conflicting results regarding indicators of health, education, and quality of life.

Ruben and Fort (2012) analyzed the FT impact for organic and conventional coffee farmers in Peru, and found no significant effect in terms of income. Conversely, Méndez et al. (2010) found a significant positive relationship between average sales price, savings, credit, risk acceptance and satisfaction with the cooperative service provision savings.

With regard to the non-monetary effects of participation in FT, the results are less inconclusive. Participation in FT has been related to better access to credit, higher investment propensity, organic specialization skills, higher levels of animal stocks (Ruben & Fort, 2012), and increased participation of women in decision making. On the other hand, no connection between FT involvement and positive effects on household livelihood in terms of education and incidence of migration have been found by Méndez et al. (2010).

Faced with these conflicting results, it is difficult to assess the efficacy of FT in managing to realize its stated goals. Most marginalized farmers are not able to enter the network and certification because of the FT entrance requirements and the lack of support

(Valkila et al., 2010; Omidvar & Giannakas, 2015), while cooperatives are not able to sell their entire production under FT conditions so that certified farmers are often forced to sell considerable portions of their production in the conventional market (Méndez et al., 2010; Valkila et al., 2010).

Some authors point their finger at the price mechanism of FT. For example, the FT minimum coffee price had not changed in the period 1988-2007 (Bacon, 2010; Valkila, 2014); indeed, over the same period, Bacon's findings reveal declining prices when discounted for inflation (Bacon, 2010), fueling allegations related to corporate capture of FT (Jaffee & Howard, 2010). The decline in the minimum price has shown that the same pricing system is closely linked to those market prices that it is intended to transform (Bacon, 2010).

The concept of the social premium, despite recent efforts by a few authors, remains one of the least studied aspects of FT. There are structural problems in the evaluation of this premium price; it is difficult to separate the benefits derived from the premium from those due to other projects for rural development (Valkila & Nygren, 2010).

4. Discussion

Results reveal that the literature on FT has grown exponentially over the past 20 years, during which FT has been studied by different disciplines, which confirms its interdisciplinary nature.

This study went beyond the identification of most productive actors and traditional citation counts, as it uses a bibliometric mapping software tool to visualize the intellectual structure of FT research.

Scientific research of the FT theme mainly developed around four main themes: the philosophical foundations, criticism and challenges posed by the involvement of corporations, consumers, and producers. The same thematic groups can be identified both in the co-citation network, as well as in the bibliographic coupling analysis network of the most recent publications.

Literature in the early years of research has been strongly influenced by the debates about what should be the role and mission of FT in the scenario of a free global market. The recognition of the FT needs to cooperate with large corporations in order to continue to pursue its objectives and to shift the attention of research to more practical aspects and issues.

Early research focuses mainly on coffee, while in more recent times the spectrum of investigation has been broadened to other certified products, both food and non-food. At the same time the implications of competition from other ethical certification schemes have been investigated in detail. On the side of consumers, this results in an attempt to achieve greater accuracy and generalizability of the results, by using new methodologies to investigate consumer preferences for certified products and WTP, and by the attempts to use incentive-compatible methods. On the side of producers, research attempts to identify the reasons for the inconclusive results on FT effectiveness and find new ways to assess the effects of the certification on producers.

Findings also suggest that FT as a unique business strategy and/or as a differentiation opportunity for producers, as well as the change in the business attitude to explore FT branding, are themes that have been only partially analyzed and deepened.

Like any evolving field of research, it is unsurprising that the documents of the co-citation analysis had cast a slightly less critical eye over the FT movement than more recent studies. However, despite the critical analysis and resizing of potentialities, authors converge on the need for more consideration of social and economic justice in international trade, and that third-party certification has a key role in ensuring that these goals are addressed. As scholars are confident about the contribution that FT can add to the broader scenario of strategies to enhance living conditions and labour rights for disadvantaged producers and labourers (Méndez et al., 2010), there is also a general agreement on the need for a profound reform of the FT system. FT should address all these issues through a long-term strategy re-organization, involving a participatory representation by smallholder cooperatives, alternative trade organizations and development-oriented civil society movements (Bacon, 2010). At the same time, research should deal with those aspects of FT that until now have received little attention, such as those related to the premium price and the use made of it, to the new organizational forms of certified producers within the FT network and to the extension of the analysis to the whole range of certified products.

5. Conclusion and limitations

This analysis of the literature through bibliographic methods has highlighted the salient aspects of FT research, from the beginning to the present day, and how the challenges and evolution that FT has been facing over the years have influenced the research and perspectives of scholars. Compared to the earliest years, when buying FT products was seen as a political statement and the FT network was meant to challenge the neoliberal economic system, FT is now working in close contact with the biggest corporations in the world and certified products can be found on the shelves of supermarkets. During this time, the debate on the engagement of FT by large corporations and the collapse of the model of alternative trade organizations have always remained a central element both within the movement and in scientific research.

Though many years have passed since the participation of corporations in the FT network, the most recent researches do not provide a definitive verdict on the effects of the mainstream strategy. There is no doubt that the implementation of this strategy has been a necessary choice, in terms of expanding the market and the brand, but it is argued that the benefits have not been equally distributed among the actors of the network, as many producers still live in conditions of extreme poverty. However, despite the fact that the evidence base is still incomplete, there are several instances of greater income stability and higher earnings for producers who engage with the FT network, as well as many other indirect but still important benefits.

As for the state of research on FT, two elements emerge: the first is the low reliability of results on consumers obtained using methods that are not "incentive compatible" or with low levels of representativeness of the samples. This necessity is not new, Ulrich and Sarasin (1995) stated that, with regard to ethical issues, research runs the risk of losing relevance, as the answers are never reliable due to different kinds of biases. As stated by Andorfer and Liebe (2012), scholars have just begun to understand and explain individual FT consumption, and "research on FT consumption would benefit from both a multiple-motives and a multiple-methods perspective". In order to overcome these problems, "incentive-compatible measures of FT consumption intentions and behavior should be used in empirical studies whenever possible" (Andorfer & Liebe, 2012), by comparing different theories and methodologies.

On the side of producers, conflicting and sometimes confusing results concerning the effects of FT, undermined by a number of uncertainties, make it difficult to compare or draw any general conclusions based on the actual evidence base. The question of whether FT producers are better off than their counterparts is very complex and cannot be confined only to questions of price and income differentials. Still, it is possible to draw the conclusion that a comprehensive assessment of the impact of FT should not only account for monetary income, but also for a wide set of welfare, empowerment and quality of life indicators. Furthermore, research should also consider the opinions and perceptions of the participants in the network, as well as their individual skills and performances over time. In addition, limiting the value chain to the study of coffee and some cases of a few other certified products, the knowledge on the side of producers is limited in many directions. Discordant results demonstrate the complexity in finding information about the effectiveness of FT and represent an indicator of the limited awareness of the FT system mechanisms and limited identification with FT by producers (Valkila & Nygren, 2010; Valkila, 2014), two issues in which FT should invest more effort.

Bibliographical methods are not without limitations. First of all, the tendency of authors to cite their own works can distort the network of citations and give greater emphasis to the most prone authors of this practice. However, the effects of this distortion may be limited when the number of authors is sufficiently high, compared to the number of articles published, as in the case of the FT literature. Second, highly ranked journals tend to be cited more by authors, and this may result in overestimating the contribution of these journals compared to the lower ranked ones. Third, the time between the publication of an article and the moment when that article is cited leads to a greater weight on earlier publications, that – being available for a longer time – received more quotes compared to more recent research.

Another limitation is regarding the source from which the data are collected, in this case the Web of Knowledge Core Collection, which is almost entirely composed of articles in the English language. Expanding the spectrum of publications even to non-English articles could actually return more complete results. Bibliometric analysis suffers from several limitations that should be considered in the interpretation of the results, the most important of which are introduced below. First of all, there are several reasons why a document may be cited or not, and a large number of citations does not imply quality. Indeed, bibliometrics do not measure quality and it is important to analyze the documents by combining bibliometric and qualitative methods in order to evaluate the quality and contributions of works. Then there are some limitations related to the structure and functioning of the world of scientific publishing, such as the advantage of experienced researchers over early career researchers, and of long-running over new journals, the different rates of publishing between different fields of research and WoS limited coverage of non-English language publications and book publications. Finally, although bibliometric methods represent very efficient tools to explore a research scenario, they can be very time-consuming when applied to very productive research areas, as they require reading a large number of articles.

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Year	total publications	N° of Authors	N° Au/N° Docs	Times Cited	average number of citations	N° of references	N° of references / N° of docs	Cited references publication year *
1990	2	2	1,0	1	0,5	12	6,0	410
1991	2	2	1,0	10	5,0	39	19,5	562
1992	3	3	1,0	4	1,3	29	9,7	524
1993	3	4	1,3	22	7,3	302	100,7	631
1994	8	9	1,1	107	13,4	170	21,3	727
1995	3	4	1,3	63	21,0	69	23,0	780
1996	4	5	1,3	25	6,3	61	15,3	906
1997	2	2	1,0	4	2,0	0	0,0	1123
1998	4	8	2,0	117	29,3	124	31,0	1102
1999	6	26	4,3	155	25,8	183	30,5	1383
2000	3	5	1,7	82	27,3	57	19,0	2103
2001	7	9	1,3	139	19,9	140	20,0	1980
2002	12	21	1,8	295	24,6	303	25,3	2742
2003	14	37	2,6	608	43,4	374	26,7	2807
2004	12	15	1,3	554	46,2	555	46,3	2927
2005	39	81	2,1	2250	57,7	1854	47,5	3817
2006	20	34	1,7	550	27,5	1043	52,2	2980
2007	36	81	2,3	1061	29,5	1799	50,0	3515
2008	56	126	2,3	1068	19,1	2308	41,2	3066
2009	78	139	1,8	1383	17,7	3816	48,9	2939
2010	98	209	2,1	1613	16,5	5319	54,3	2714
2011	62	210	3,4	596	9,6	3179	51,3	2012
2012	85	210	2,5	806	9,5	5077	59,7	1612
2013	88	182	2,1	327	3,7	4855	55,2	1066
2014	108	254	2,4	397	3,7	6215	57,5	726
2015	115	279	2,4	148	1,3	6986	60,7	259

Table1: quantitative analysis of trends of research on FT

* Cited references publication year: indicates the sum of the number of citations received from the documents included in the database divided by year of publication of the cited documents.

Countries	**N**	**%**
USA	281	26%
UK	198	19%
France	71	8%
Canada	66	6%
Netherlands	53	4%
Germany	50	4%
Australia	35	4%
Italy	34	3%
Belgium	31	2%
Mexico	25	2%
Switzerland	25	2%
China	21	2%
Japan	21	2%
Spain	21	2%
South Africa	20	1%

Table 2a: Top 15 most productive countries and institutes in FT research.

Most productive institutes	**N**
Colorado State Univ (USA)	18
Univ Calif Santa Cruz (USA)	16
Michigan State Univ (USA)	16
Wageningen Univ (NETHERLANDS)	15
Univ Warwick (UK)	14
Univ Wisconsin (USA)	14
Univ British Columbia (USA)	12
Univ Oxford (UK)	12
Univ Roma Tor Vergata (ITALY)	11
Univ Lancaster (UK)	11
Univ Kentucky (USA)	11
Univ London (UK)	10
Univ Sheffield (UK)	10
York Univ (UK)	10
Vrije Univ Amsterdam (NETHERLANDS)	9

Table 2b: Top 15 most productive institutes in FT research.

Journals	N° of docs	%	Subject Categories	N° of docs	%
Journal of Business Ethics	83	9%	Business & Economics	340	22%
Geoforum	31	3%	Social Sciences - Other Topics	147	9%
International Journal of Consumer Studies	26	3%	Agriculture	129	8%
Agriculture And Human Values	24	2%	Public Administration	121	8%
Journal of Rural Studies	17	2%	Environmental Sciences & Ecology	109	7%
World Development	17	2%	Geography	90	6%
Sustainable Development	17	2%	Sociology	78	5%
Third World Quarterly	13	1%	Government & Law	69	4%
British Food Journal	13	1%	Food Science & Technology	52	3%
Environment And Planning A	12	1%	International Relations	47	3%
Journal of International Development	11	1%	Science & Technology - Other Topics	44	3%
Journal of Cleaner Production	10	1%	History & Philosophy of Science	35	2%
Globalizations	10	1%	Nutrition & Dietetics	24	2%
Cahiers Agricultures	10	1%	Engineering	24	2%
Ecological Economics	10	1%	Anthropology	21	1%
Food Quality and Preference	10	1%			

Table 3: Ranking of the most productive journals and most common subject categories

Authors	IC	TC
Raynolds L	342	561
Renard M	102	283
Bacon C	244	312
Jaffee D	46	209
DePelsmacker P	126	176
Guthman J	37	170
Ponte S	52	157
Gereffi G	0	152
Nicholls A	74	151
Mutersbaugh T	143	347

Table 4: Ranking of the 10 most cited authors. TC = Total number of citations, not available for books. IC= number of citations by the documents of the database.

Publications	**Title**	**IC**	**TC**
Bacon C, 2005, V33, P497, World Dev	Confronting the coffee crisis: Can Fair Trade, organic, and specialty coffees reduce small-scale farmer vulnerability in northern Nicaragua?	116	224
Jaffee D, 2007	Brewing Justice Fair Trade Coffee, Sustainability, and Survival	106	-
Renard M, 2003, V19, P87, J Rural Stud	Fair trade: quality, market and conventions	97	179
De Pelsmacker P, 2005, V39, P363, J Consum Aff	Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee	97	237
Raynolds L, 2002, V42, P404, Sociol Ruralis	Consumer/Producer Links in Fair Trade Coffee Networks	88	171
Raynolds L, 2000, V17, P297, Agriculture And Human Values	Re-embedding global agriculture: The international organic and fair trade movements	86	207
Goodman M, 2004, V23, P891, Polit Geogr	Reading fair trade: political ecological imaginary and the moral economy of fair trade foods	79	171
Nicholls A, 2005, Fair Trade Market Dr	Fair Trade: Market-Driven Ethical Consumption	74	-
Renard M, 2005, V21, P419, J Rural Stud	Quality certification, regulation and power in fair trade	71	120
Loureiro M, 2005, V53, P129, Ecol Econ	Do fair trade and eco-labels in coffee wake up the consumer conscience?	70	132
Moore G, 2004, V53, P73, J Bus Ethics	The Fair Trade Movement: Parameters, Issues and Future Research	69	106
Taylor P, 2005, V33, P129, World Dev	In the Market but Not of It: Fair Trade Coffee and Forest Stewardship Council Certification as Market-Based Social Change	64	200
Raynolds L, 2007, Fair Trade Challenge	Fair Trade: The Challenges of Transforming Globalization	61	-
Raynolds L, 2009, V37, P1083, World Dev	Mainstreaming Fair Trade Coffee: From Partnership to Traceability	55	92
Ponte S, 2002, V30, P1099, World Dev	The 'Latte Revolution'? Regulation, Markets and Consumption in the Global Coffee Chain	51	179
Raynolds L, 2004, V16, P1109, Journal Of International Development	Fair Trade coffee: building producer capacity via global networks	50	117
Carrigan M, 2001, V18, P560, J Consum Mark	The myth of the ethical consumer - do ethics matter in purchase behaviour?	49	395
Renard M, 1999, V39, P484, Sociol Ruralis	The Interstices of Globalization: The Example of Fair Coffee	44	78
Tallontire A, 2000, V10, P166, Development In Practice	Partnerships in fair trade: reflections from a case study of Cafedirect	43	197
Barnett C, 2005, V37, P23, Antipode	Consuming Ethics: Articulating the Subjects and Spaces of Ethical Consumption	43	225

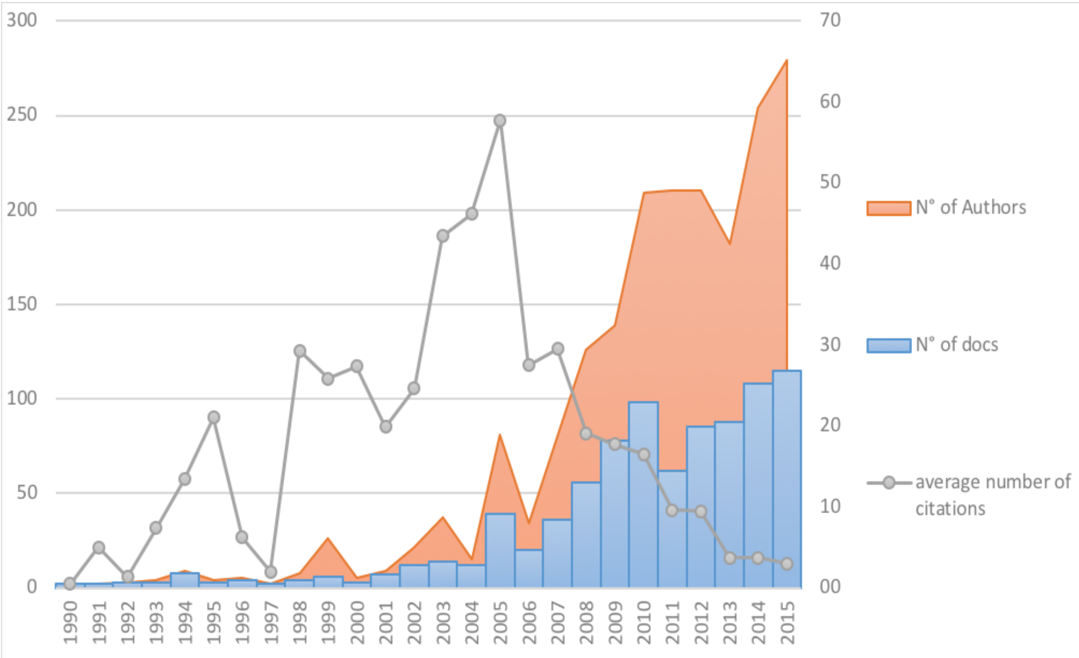
Table 5: Ranking of the 20 most cited publications. TC = Total number of citations, not available for books. IC= number of citations by documents of the database.

CLUSTER 1	citations	co-citation links	CLUSTER 2	citations	co-citation links
Renard M.C., 2003, j rural stud, v19, p87	97	814	De Pelsmacker P, 2005, j consum aff, v39, p363	97	539
Raynolds L.T., 2002, sociol ruralis, v42, p404	88	789	Loureiro M.L., 2005, ecol econ, v53, p129	70	396
Raynolds L.T., 2000, agr human values, v17, p297	86	765	Low W, 2005, int market rev, v22, p494	31	336
Renard M.C., 2005, j rural stud, v21, p419	71	728	Carrigan M, 2001, j consum mark, v18, p560	49	335
Goodman M.K., 2004, polit geogr, v23, p891	79	590	Shaw D., 1999, marketing intelligen, v17, p109	34	275
Taylor P.L., 2005, world dev, v33, p129	63	551	Davies J.A., 2003, j bus ethics, v45, p79	22	270
Renard M.C., 1999, sociol ruralis, v39, p484	44	440	Nicholls A.J., 2002, int j retail distrib, v30, p6	29	243
Lyon S., 2006, Int J Consum Stud, v30, p452	37	394	Doran C.J., 2009, j bus ethics, v84, p549	35	242
Guthman J, 2007, antipode, v39, p456	40	358	Bird K., 1997, business ethics euro, v6, p159	28	239
Raynolds L.T., 2004, world dev, v32, p725	35	339	Strong C., 1996, marketing intelligen, v14, p5	24	237
Mutersbaugh T, 2005, j rural stud, v21, p389	33	338	Shiu E., 2003, eur j marketing, v37, p1485	30	236
Hudson J, 2003, organ environ, v16, p413	41	337	Ozcaglar-toulouse N., 2006, Int J Consum Stud, v30, p502	26	232
Barham E, 2002, agr human values, v19, p349	27	314	De Pelsmacker P, 2007, j bus ethics, v75, p361	32	229
Bryant R.L., 2004, t i brit geogr, v29, p344	35	301	Arnot C, 2006, can j agr econ, v54, p555	36	221
Barnett C, 2005, antipode, v37, p23	42	286	Ajzen J, 1991, organ behav hum dec, v50, p179	32	204
Mutersbaugh T, 2002, environ plann a, v34, p1165	25	280	Shiu E, 2000, j marketing manageme, v16, p879	22	198
Ponte S, 2005, econ soc, v34, p1	32	264	Auger P, 2003, j bus ethics, v42, p281	28	178
Bacon C.M., 2010, j peasant stud, v37, p111	31	259	Chatzidakis A, 2007, j bus ethics, v74, p89	32	173
Micheletti M, 2003, political virtue and shopping	39	247	De Pelsmacker P, 2006, int j nonprofit volu, v11, p125	23	161
Jaffee D, 2010, agr hum values, v27, p387	23	226	Bermeir J, 2006, j agr environ ethic, v19, p169	33	159
Murdoch J, 2000, econ geogr, v76, p107	23	224	Auger P, 2007, j bus ethics, v76, p361	21	147
Whatmore S., 1997, globalising food, p287	30	224	Browne A.W., 2000, food policy, v25, p69	21	147
Mutersbaugh T, 2005, environ plann a, v37, p2033	25	209	Andorfer V.A., 2012, j bus ethics, v106, p415	23	129
Wright C., 2004, J. Int. Dev., v16, p665	22	208	De Ferran F, 2007, food qual prefer, v18, p218	21	117
Freidberg S, 2003, soc cult geogr, v4, p27	21	200			
Guthman J, 2004, cal stud crit hum ge, v11, p1	26	194			
Bourdieu Pierre, 1984, distinction social c	21	179			
Dolan C.S., 2010, geoforum, v41, p33	21	179			
Cashore B, 2004, governing markets fo	21	168			
Clarke N, 2007, polit geogr, v26, p231	21	159			

Table 6: Reference co-citation analysis cluster composition

CLUSTER 3	citations	co-citation links	CLUSTER 4	citations	co-citation links
Bacon C, 2005, world dev, v33, p497	116	889	Nicholls A., 2005, fair trade market dr	74	605
Jaffee D, 2007, brewing justice: fair trade coffee	106	818	Moore G, 2004, j bus ethics, v53, p73	69	513
Raynolds L.T., 2004, j. int. dev. , v16, p1109	50	600	Raynolds L.T ., 2007, fair trade challenge	61	524
Raynolds L.T., 2009, world dev, v37, p1083	55	513	Tallontire A., 2000, dev pract, v10, p166	43	393
Ponte S, 2002, world dev, v30, p1099	51	434	[anonymous], 2007, fair trade coffee pr	43	375
Murray D.L., 2006, development in practice, v16, p179	34	393	Low W, 2005, sustain dev, v13, p143	37	372
Raynolds L.T., 2007, agr hum values, v24, p147	42	364	Barratt Brown M, 1993, fair trade reform	28	291
Gereffi G, 2005, rev int polit econ, v12, p78	41	349	shreck A, 2005, agr hum values, v22, p17	29	289
Taylor P.L., 2005, sustain dev, v13, p199	29	330	Hira A, 2006, j bus ethics, v63, p107	29	288
Valkila J, 2009, ecol econ, v68, p3018	41	325	Leclair M.S., 2002, world dev, v30, p949	32	277
Rice R.A., 2001, j agr environ ethic, v14, p39	32	293	Levi M, 2003, polit soc, v31, p407	28	267
Arnould E.J., 2009, j public policy mark, v28, p186	30	284	Reed D, 2009, j bus ethics, v86, p3	30	262
Bray D.B., 2002, soc natur resour, v15, p429	30	282	Murray D. L., 2000, agr hum values, v17, p65	28	254
Calo M., 2005, revaluing peasant co	30	273	Jaffee D, 2004, rural sociol, v69, p169	34	250
Daviron B.T., 2005, coffee paradox globa	27	256	Renard M.C., 2007, fair trade challenge, p138	23	248
Bacon C.M., 2008, globalizations, v5, p259	31	253	Low W., 2006, j strategic marketin, v14, p315	27	226
Murray D., 2003, one cup time poverty	23	245	Littrell M. A., 1999, social responsibilit	28	208
Talbot J.M., 2004, grounds agreement po	22	231	Moberg M, 2005, hum organ, v64, p4	21	200
Muradian R, 2005, world dev, v33, p2029	26	214			
Giovannucci D, 2005, food policy, v30, p284	23	210			
Becchetti L, 2008, world dev, v36, p823	23	183			
Mendez V.E., 2010, renew agr food syst, v25, p236	27	179			

Table 6 (continuation): Reference co-citation analysis cluster composition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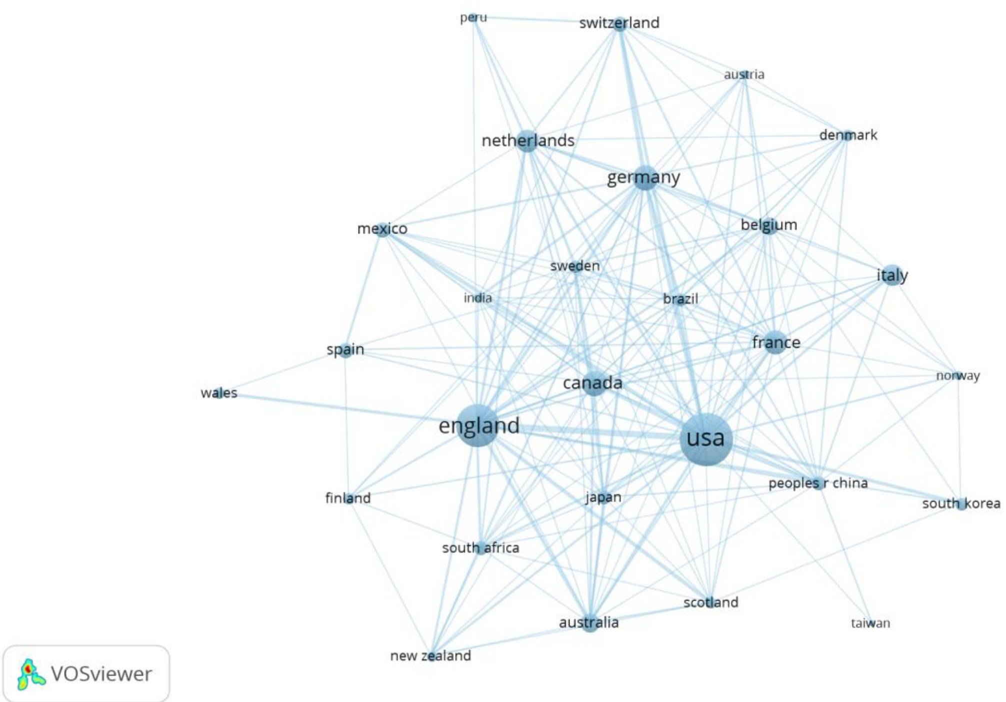
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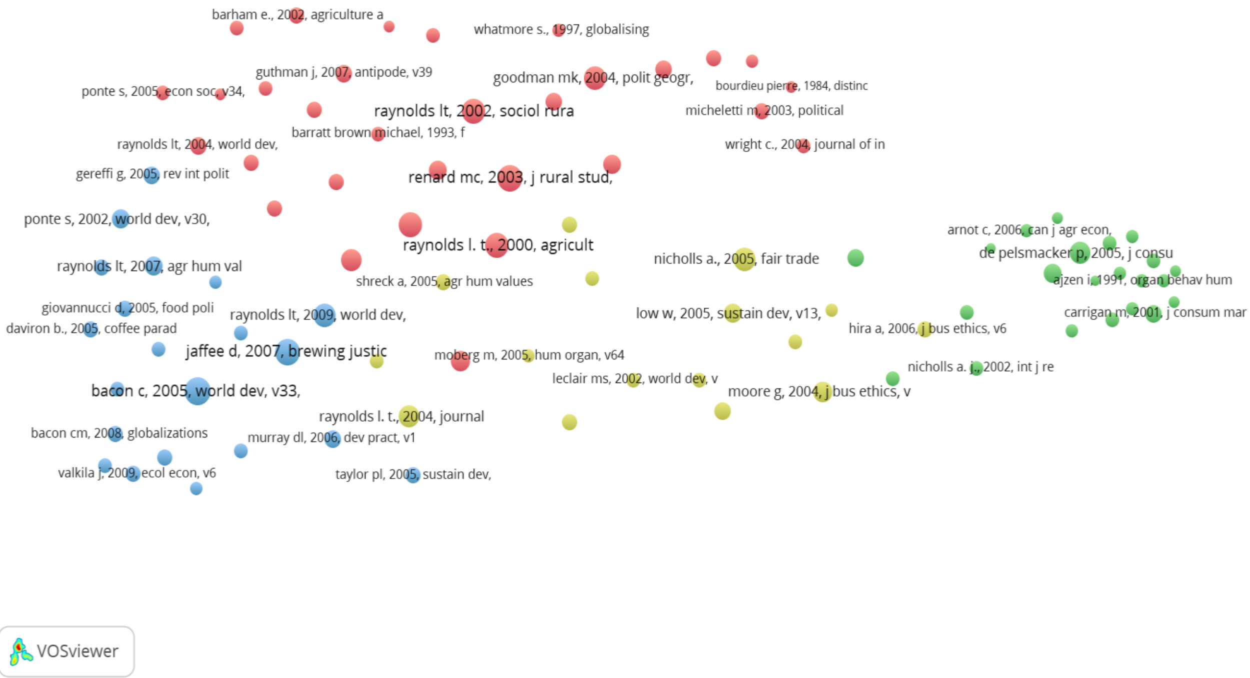
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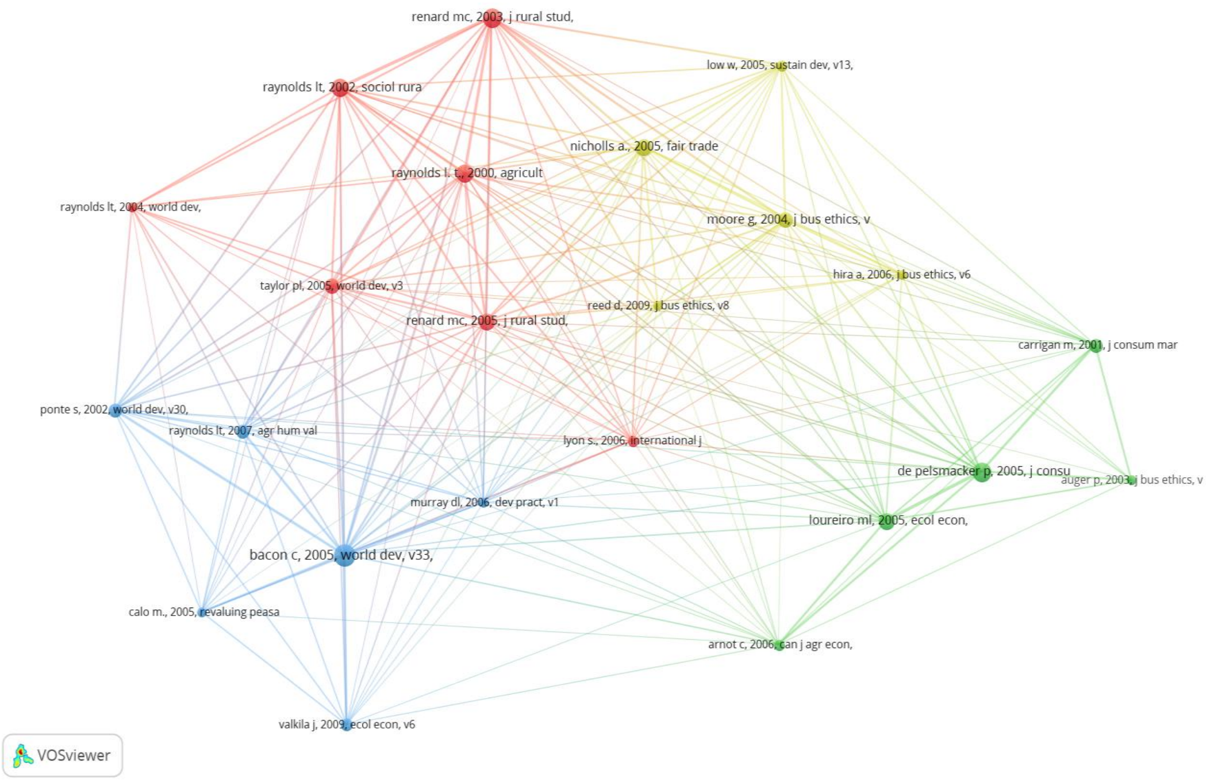
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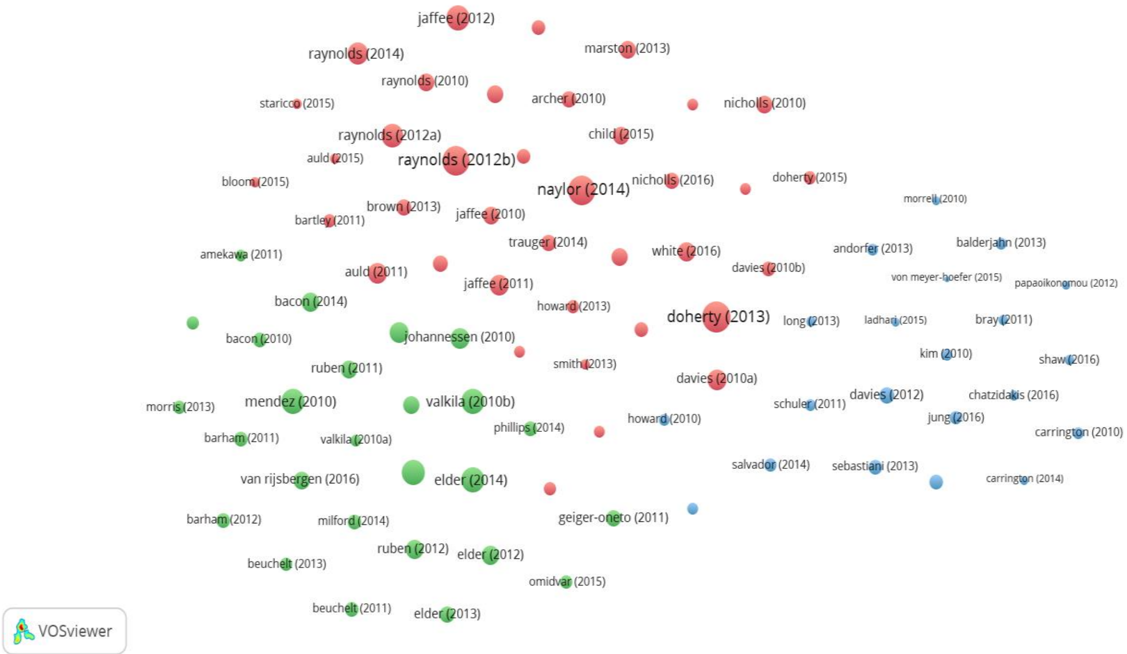
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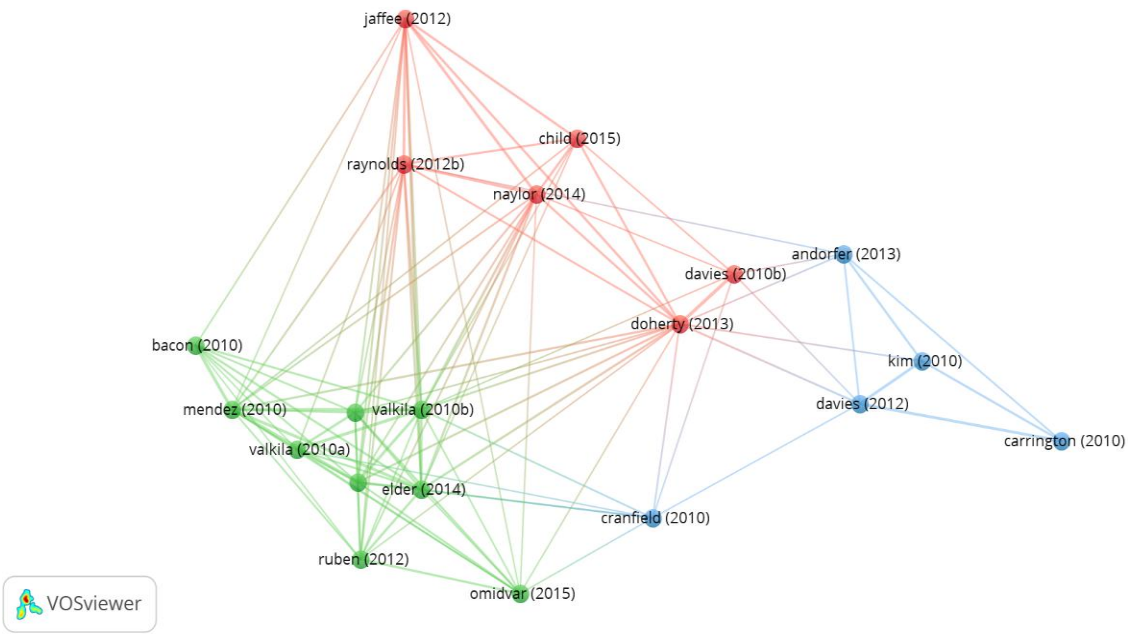
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