

BOOK OF ABSTRACTS

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WELCOME MESSAGE

Regional Entrepreneurial Ecosystems and Sustainability – Rethinking the Helix

In an increasingly global and feverish economy, regional cartography is not always sufficiently documented and discussed. At the same time, the narrative “trial-mistake” is often discouraged, considering that when success emerges one should hide hypothetical errors. In a scenario, in which the new industry paradigms and value-adding processes require a critical reflection on the sustainability of entrepreneurial ecosystems and on the relations between firms, governments, society and the processes of knowledge creation emerges the 4th International congress of Regional Helix, under the topic “*Regional Entrepreneurial Ecosystems and Sustainability - Rethinking the Helix*”.

Since its creation, the Regional Helix conference emphasizes the importance of cooperation and this edition is no exception and it results from a joint organization between the School of Technology and Management of the Polytechnic of Porto, through its research center (CIICESI), of the Polytechnic Institute of Castelo Branco, NECE (research center of the Department of Economics and Management of the University of Beira Interior) and University of Trás os Montes and Alto Douro.

The participation of several researchers from national and international institutions is an important step in the achievement of these aims. We are pleased to welcome colleagues from countries across the globe. We believe that this multiplicity reflects the interest that regional entrepreneurial ecosystems and sustainability issues have transversely across the world.

Finally, we would like to call your attention to the several publication opportunities that Regional Helix 2019 bring to you, and we invite all colleagues to submit their papers for the publications that better fit their research.

Welcome to the fourth edition of Regional Helix!

Vítor Braga & Marisa Roriz Ferreira
Chair and Co-Chair of the Organizing Committee



PARALLEL SESSION 12

COME IN, WHO IS IT?: THE PREDISPOSITION OF THE SOCIAL ECONOMY TO THE CIRCULAR ECONOMY

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Extended Abstract

Abstract

The main objective of the study is to analyse the predisposition of social economy agents to share resources. To answer the objective, we opted for a qualitative exploratory approach directed to managers and a quantitative exploratory approach directed at employees. The results showed that they have a significant economic impact on quantity, paid work and turnover (CESE, 2017). We have measured the relationship between the demonstration of interest in sharing and qualification appropriate to the function of managers and employees. It was verified the practice of informal and unregulated sharing of own and other resources, between local partners, without a model of knowledge management, assets, time, use/reuse and use. It is hoped that the study could serve as a scientific/methodological basis for a regional investment, R&D and partnership project, combining the interest in a smart region and applying the principles of circular economy

Keywords: Circular economy, social economy, smart economy, smart regions, sharing.

1 Introduction

The expression "Come in, who is it?" Is present in various works (Torga, 1941; Cabral, 2003; Morais, 2017), symbolizes transmontane values such as sharing and welcoming, which may explain the focus of the research work. Social organizations have in their genesis the sharing, the networking and the collaborative work, according to the Basic Law of the Social Economy (2013). Is it possible to evolve following the challenges of the economy? According to Taborda (2016) in the transport sectors (e.g. Uber or Riversimple), tourism (e.g. Airbnb), housing (e.g. co-habitation) and digital communities (e.g. Share) there is a growth of interest and users. Several case studies (e.g., Spowers, 2018, Recommerce, 2019) by The Ellen MacArthur Foundation (2019) point out that in the future, no sector will be immune to the advance of technology, concern about climate change, and the transition to the sharing economy at the expense of the economy of ownership of goods.

Somehow, the evolution of the economy advances to the combination of concepts that are related: intelligent economy, circular and sharing, which represent intelligent solutions to circulate at the highest level of utility and opens the possibility of having shared resources.

The purpose of this research is to understand if there is a predisposition of social economy entities to implement intelligent solutions that allow the management of their assets in a shared way, based on the circular economy, but above all with a regulated management through a bottom-up approach. The research aims to prove a possible relation between three concepts for sustainability of the territory under study, which may be the basis of the performance economy referred by Stahel (2010), based on science, knowledge and technology, and that is focused on design of innovative and more efficient digital services, resulting from the combination of raw materials, products, systems and intelligent solutions.

2 Literature Review

The key concepts considered pertinent to the theoretical framework are presented as follows.

2.1 Social economy

The social economy is constituted by organizations whose corporate purpose is the satisfaction of needs of general interest. It is present in the sectors of education, social services, health care, insurance, banking, agriculture, tourism, culture, sport, etc. Article 4^o of the Basic Law on Social Economy (2013) defined the types of entities to be incorporated, by legal nature, which are set out in the SEC 2010 (2013) and are identified in Table 1.

It is in this different form of economy that Demoustier (2001) sees characteristics in the "irreducible" people that advance, showing that one can undertake with others, cooperate in work, encourage one another in difficulty, invest one's own money without forget to be supportive. Associations, cooperatives and mutual societies are laboratories for the future that, without neglecting management and the question of money, are mainly concerned with the question of citizenship, social responsibility and the will to build a more humane society.

2.2 Circular economy

The concept has origins linked to various schools of thought, including performance economics. Stahel e Reday-Mulvey (1981) defend the vision of an economy in cycles, its impact on job creation, economic competitiveness, resource reduction and waste prevention. Responsible for the term "cradle to cradle" Stahel (2010) states that circular economy should be considered a framework: a generic concept that is based on specific approaches around a set of principles.

The Ellen MacArthur Foundation defines circular economics as a restorative and regenerative design economy, and that it intends to keep products, components and materials at its highest value and utility at all times. This concept tries to reproduce, in the productive process, what nature has done millions of years ago, in line with the observation of the french chemist, Antoine Lavoisier "in nature nothing is created, nothing is lost, everything is transformed" (Lemos, 2018).

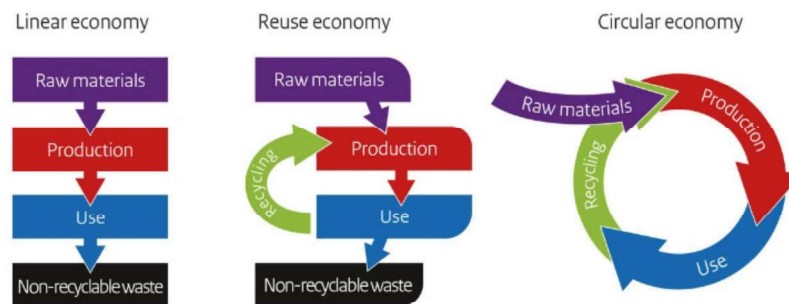


Figure 1: Transition between linear economy and circular economy. Source: Circular Economy Portugal (2019).

2.3 Smart cities

Komninos (2002) states that the concept when it emerged did not distinguish cities from intelligent regions. These should not be limited to the digital environment and to web platforms that provide services or information. They must take advantage of the interaction of citizens and the advantages that this interaction provides, through all the technology that facilitates interaction. That is why they add three fundamental areas of action in which the main objective is to create conditions for sustainability, improve the living conditions of the population and foster the creation of a smart and creative economy through management based on data analysis.

3 Research Methodologies

3.1 Study objectives

In order to achieve the general objective, four specific objectives were defined:

1. To analyse the economic impact of the organizations that make up the social economy, based on published data;
2. To verify if the interest in sharing is related to the skills that the agents have, based on their own information, that leads to the implementation of a training/information strategy;
3. Analyse historical behaviour on resource sharing, based on testimony from relevant stakeholders;
4. To verify the interest of social economy entities, in sharing resources among themselves, obeying the principles of circular economy, and that lead to a common strategy of action, based on testimonies of those in charge of the organizations.

For the first specific objective, a bibliographic research was carried out, in Portugal and in the European Union, leading to the identification of the 180 entities of the study. For the second, a survey was carried out on the employees of the 180 social economy organizations, through specific software, for the purpose of creating the questionnaire, analysing and processing data. It was shared with potential respondents through a short text of call for participation, ensuring anonymity and confidentiality in both the collection and in the treatment and conservation of data in compliance with the GDPR. For the remaining two objectives, exploratory interviews were carried out with the top managers of the organizations that are based in the territory.

In the bibliographic research no study with coincident objectives was identified, which relates the three concepts. As the circular economy is not a research area, some papers are focused on green economy, natural capital, recycling, reuse of resources and initiatives of the profitable sector, but few on the sharing in the circular economy. Studies carried out by the CESE (2017) on the social economy show the social and economic importance of the entities that comprise it, but studies with examples of regulated resource sharing are not known. On the other hand, there are publications (e.g., Komninos, 2002, Hollands, 2008, Selada & Silva, 2013, Pinto, 2017) on smart cities, smart activities and initiatives, but no studies have been identified on benefits of sharing service in the non-profit sector.

3.2 Definition of the population for quantitative and qualitative research

The bibliographical research focused on the key concepts and led to the typification of the entities of the social economy of the Terra Quente transmontana sub-region, to define the population to be surveyed. Notwithstanding their non-profit nature, the social economy operators are organised according to the SEC 2010, according to Table 1.

Table 1: Social economy operators by institutional sector of the European System of Accounts 2010.

Institutional Sector SEC 2010	Social Economy Companies and Macroeconomic Organizations
Non-financial companies (S11)	<ul style="list-style-type: none"> - Cooperatives (workers, agrifood, consumers, education, transport, housing, healthcare, social, etc.) - Social enterprises - Other company-based associations - Other private market producers (some associations and other legal entities) - Non-profit institutions serving non-financial organizations of the social economy - Non-financial corporations controlled by the social economy
Financial companies (S12)	<ul style="list-style-type: none"> - Credit unions - Mutual insurance companies * - Insurance cooperatives - Non-profit institutions serving non-financial organizations of the social economy
Families (S14)**	- Non-profit institutions serving limited-size families
Non-profit institutions serving households (S15)	<ul style="list-style-type: none"> - Social action associations *** - Foundations of social action *** - Other non-profit organizations serving households (cultural, sports, etc.)

(*) Except for organizations managing the social security system and, in general, mutual societies whose membership is compulsory, or which are controlled by companies in the non-social economy.

(**) The family sector (S14) includes individual entrepreneurs and joint-stock corporations without legal personality that do not belong to the social economy. It also includes non-profit organizations of limited size that are not part of the social economy.

(***) Non-profit organizations with membership and voluntary participation and strategic and functional autonomy, the purpose of which is to pursue social welfare objectives through the provision of goods or the provision of social services or merit free or at prices that are not economically significant, to persons or groups of persons who are vulnerable, socially excluded or at risk of exclusion. These organizations constitute the third sector of social action, which is obviously part of the social economy.

Source: Adapted from SEC 2010 (2013).

According to CESE (2017) in the last decades both academic institutions and national statistical institutes and governments have been working towards the need for statistics to gauge the weight of the social economy in the EU's 28 MS. CIRIEC (2006) developed a methodology, at the request of the EU, of the Manual for the preparation of satellite accounts of social economy enterprises, in parallel with the United Nations Handbook on Satellite Accounts for Non-Profit Institutions.

In Portugal CASES and INE released the results of the Social Economy Satellite Account, with data from 2013. The data confirm the of the sector, not only in employment and wealth, but also social, pointing out that many those organizations play an important role in the social balance in the fight against poverty and the territorial balance (INE, 2016).

The representativeness in the Terra Quente Transmontana was verified with information from national entities (e.g., GEP/MTSSS, 2016, DGSS, 2019, CASES, 2019) and locations through each of the five municipal social networks, where the entities of the sector (municipalities of Alfândega da Fé, Carrazeda de Ansiães, Macedo de Cavaleiros, Mirandela and Vila Flor).

It was reported to the GEP/MTSSS (2016), through the Single Report, 1,579 companies of different legal natures, which have 7,965 employees on their staffs. This source identified 86 entities employing 1,602 workers but includes only those who report information or who have a staff. They represent 5.4% of companies that comply with the legislation, reporting the number of employees, which represents 20.1% of the employees in 2016.

On the other hand, 62 registered Houses of the People, Cooperatives and IPSS were identified in the DGSS (2019). The number of social economy entities registered in Social Security, are distributed as follows, by municipality: 23 (37%) in Macedo de Cavaleiros, followed by 16 (26%) in Mirandela and 14 (23 %) in Alfândega da Fé with 14 (23%). Carrazeda de Ansiães and Vila Flor, presented 7 (11%) and 2 (3%), respectively. This source only includes those who have registered, and are left out those who do not have social facilities, or reason that exempts registration

At the same time, the accredited cooperatives were consulted at the CASES Portal (2019). It was identified eight cooperatives accredited in the study region: 3 in Macedo de Cavaleiros, 3 in Mirandela, 1 in Alfândega da Fé and 1 in Carrazeda de Ansiães. This source made it possible to identify and quantify the number of accredited cooperatives, but does not include those who did not credential, either because they did not meet the credential requirements, or for another reason.

Finally, it was identified the entities of the regional social economy, by municipality, that are part of the Local Council of Social Action, from Terra Quente Transmontana Social Network. It was considered to be the most comprehensive local platform for the object of study. For this purpose, the five municipalities of the region under study were consulted. Figure 2 represents the 180 entities distributed per municipality.

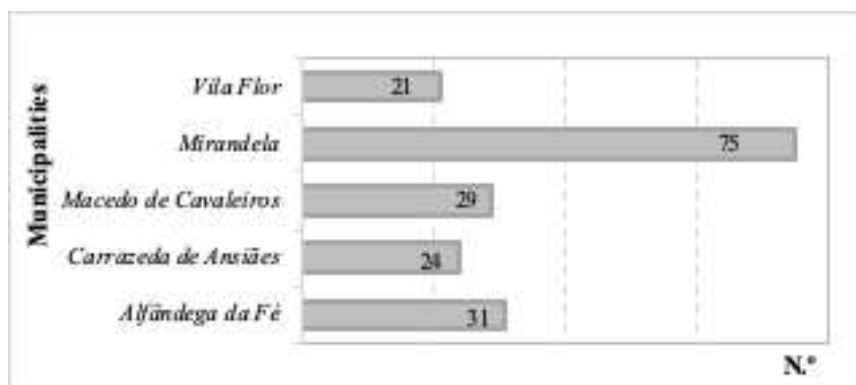


Fig. 2: Number of entities that belong to the Social Network per municipality.
Source: Municipalities of Terra Quente Transmontana.

4 Discussion and Results

The research reached the proposed objectives insofar as it allowed to determine the predisposition of the social economy agents for the management of shared resources that work in the region, which is the general objective of the present work. It could be concluded that this predisposition exists. Given the first specific objective, it was possible to conclude that social economy organizations have a significant economic impact, both at national and regional level, as well as in quantity, paid work and turnover.

It was not possible to conclude that there is a direct relationship between demonstration of interest in sharing and competencies of employees (second objective), once they were adequately qualified for the functions they occupy, they know how to identify the aspects in which the organization can improve, and are interested in sharing resources and knowledge through management models.

The qualitative study made it possible to analyse the behavioural history of organizations on the sharing of resources (third objective), and it can be concluded that there is a practice in sharing informal and unregulated resources between themselves and others without any form of management in terms of time, use, reuse and use.

Regarding the fourth specific objective, it can be concluded that the studies corroborate the interest of social economy entities in sharing resources among themselves, obeying the principles of circular economy, and that lead to a common strategy of action.

In the course of the present investigation, the interest of the agents in knowing the subject and participating in an effective way was evident: the first contribution is the awakening to the interest about sharing. On the other hand, the reflection that the subject raises in the respondents on the predisposition for the sharing in the organizations, is the second contribution, because it can stimulate new behaviours and new attitudes that could have implications in the normal operation of the organizations and in the management of the resources.

In the context of creative resources, namely the use of fact sheets, it was pertinent to explain the research topic in an appealing way and was considered as a tool to raise awareness among the interlocutors for the application of the principles of circular economy. It was the third contribution to the understanding of this concept, since the great majority considered its application limited only to the scope of the use and reuse of natural resources. The fourth contribution was the self-assessment of the employees and managers as to the organization's operation, which emphasizes the importance of improving their positioning and betting more on the image they project inside and outside the organizations

5 Conclusions

The main conclusion of this ongoing research work allows us to assume that it is possible to join efforts to reduce social asymmetries and to recognize that the sharing of knowledge and management practices can be a solution for the territory. Given the results obtained, social economy entities can design and implement a resource management model through a management platform, which provides a rental and sharing system, favouring the reuse and refunctionalisation of resources, in order to be economically more efficient and sustainable.

It is suggested to focus on the qualification of professionals for the activities of animation of people with dependence on third parties, in the different social responses existing and in the different age groups. This is because there are social and private facilities and equipment, but there is no articulation between social partners to promote leisure, recreation and social activities that promote the social integration of dependent people and active aging. It is also suggested that the articulation incorporate social responses for the families of dependent people, promoting the permanence in the family. It is well known that the introduction of new behaviour of social causes has a greater impact when it is carried out by young people. It would be useful to promote these behaviours through an awareness-raising campaign for the pooling of resources in the grouping of schools through Information and Communication Technologies. And, multimedia resources, or materials that can be manipulated for children attending primary school, 2nd and 3rd cycle of basic education and for young people who attend secondary education in thematic clubs under themes such as innovation, entrepreneurship, circular economy.

In the analysis of investment incentives in the structural programs of the Community Strategic Framework 2014-2020 it is possible to identify investment opportunities that prioritize the merits of the applications when they demonstrate the intelligence of the territories in the use and reutilization of the resources at their disposal. This reality makes foresee a perfect relationship between a smart region and the application of the principles of circular economy. Likewise, analysing the support programs of Portugal 2020, and RIS3 (2015) it can be verified that the resources and assets of the territories are valued when they demonstrate innovation in the territories and the impact on public policies. The outline of an investment project promoted by a formal partnership between the organizations of the social economy of Terra Quente Transmontana, can meet the requirements to be considered as an example or a pilot project, resource management, through a platform.

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