

EXPANDED ABSTRACT

The Social Balance and the Relations Between the Sustainable Development Goals and the Cooperative Principles for Colombia under a Social Network Analysis

Objectives

This article lays down two strong elements in the search for a consensus between the indicators that best represent the practices of the Social and Solidarity Economy-based economy (SSE, hereinafter) and their contribution to the Sustainable Development Goals (SDGs, hereinafter), 1) sustainability according to Brundtland, and 2) the idea that something must be achieved “beyond GDP” as an integral indicator of progress, always on the economic, social and environmental level

The tendency for accountability upon the intrinsic aspects regarding social profitability tends to make the metrics micro. In fact, the tools based on social balance which are drawn out raise this perspective and leave out the importance of the aggregates, even if they were groups of component units of cooperativism or belonging to the SSE (sectors, communities, territories of varying levels). It should also be borne in mind that if there is no reference or standard, then there is no possible comparability within entities or components of the social economy. This paper proposes an integration between the meso and macro references as benchmarks for placing the micro aspects.

In addition, in the traditional comparability of the Social Economy, the negative externalities generated by SSE entities are usually waived and we find metrics that only add up and do not subtract, contributing to a lack of representation of reality and for scholars from other fields to look down on our progress as they point to it with an excessive idealization.

Therefore, without forgetting the core of the issue, the objective of this work is to delve into the way in which the elements identifying cooperatives and SDGs correlate each other.

The methodological design

If the Social Balance reports the incidence of cooperative action and with it the social progress achieved, how much do the results coming from cooperatives contribute to the SDGs? This work aims at identifying which constructs relying on economic theories that govern monetary, non-monetary and convertible measurement should be taken into account. To pursue it, a measurement of Release of Resources, Social Surpluses and Merit Goods of Cooperativism.

Each of these calculations is based on the fact that there is Non-Persistence in Personalist Profit Motive. Furthermore, the Release of Resources, Social Surpluses and Merit Goods stemming from cooperativism make up routines that result, technically speaking, in extended Social Transfers in Kind (STK, hereinafter), but they are on the “expanded way”. These determine the differentiating factors of cooperatives (and of other social-economy-based companies) in contrast to capitalist firms. These issues are closely related to the institutionalist view regarding social and cooperative economy.

On the other hand, the graphic expression of a network linking the SDGs to the Cooperative Principles either at a micro level (cooperative) or at a certain level of aggregation (whether sectorial, spatial, by type of cooperative, and/or for each component of the social economies) shapes the graph which may clarify the concepts network as far as centrality and cohesion of the network of relationships is concerned. Thus, if a node has more relationships with the rest and these are even sounder, it will be considered the head in the network. The node centrality can be located on the graph depicting the network based on algorithms available on UCINET 6 and Netdraw. Thus, the transversality of the cooperative principles and SDGs is inferred.

As expressed above and based upon the results of the Delphi method, a group of experts on cooperativism from CIRIEC-Colombia and the Colombian cooperative community evaluate the contribution of cooperativism to the SDGs in a mode 2 data matrix on a Likert scale 1-3, from which it is possible to obtain networks based on the transversality of the cooperative principles by means of common SDGs, or of SDGs under common Cooperative Principles.

In this sense, to approximate the correspondence between the 17 SDGs and the 7 Cooperative Principles, the experts will break down the goals of each of the 17 SDGs and apply a scale to the contribution of the cooperative principles towards them.: 1. Hard, 2. Marginal, 3. Adequate. Then, an average is obtained from the scale of the goals making up each SDG. At the same time, the relationship between the cooperative principles and the SDGs is cross checked so that the correlations offer a valuable network as regards intensity of the contribution between the nodes (Principles and Goals) involved.

For the “Core-Periphery” analysis of the network, that is, of the most intense versus least intense interrelationships, the “hill climbing” algorithm is applied to UCINET 6, which adjusts itself to the ideal division of the nodes using the number of relationships for binary data in an initial split and an eigenvector for the valued data available for the matters, along with several random divisions. This algorithm iterates to fit the initial splits of the nodes and reports the best alignment.

Results

The Cooperative Principles can be characterized as specific, with a mainly internal repercussion, such as the principles of Open and Voluntary Membership, Democratic Member Control and Autonomy

and Independence as well as of broad environment. The last principles, such as that of Education, Training, and Information, Concern for Community and Cooperation Among Cooperatives, among others, are protagonists of an additional contribution outside the specific cooperative environment, understood as additional externalities, due to the fact that many SDGs are broken apart into goals to which, almost exclusively, one can contribute through public policies and they are not easily opened to the cooperatives' contributions.

Another network of SDGs-cooperative principles clusters, at its core, the principles concerned with Members' Economic Participation, Equality, Education, Training, and Information, Cooperation Among Cooperatives and Concern for Community, together with the SDGs Sustainable Cities And Communities and Quality Education.

The article highlights that, due to its representation of centrality, "power" is itself aligned with the more central nodes and the principle of Concern for Community, for being the node with the highest concentration to the contribution of the SDGs. Secondly, it outlines the principle of Education, Training, and Information, and so on until the most peripheral principles are reached; but nonetheless important, the relationship of Autonomy and to SDGs is likewise significant for cooperative endeavors and stands out for its capacity to contribute to the accomplishment of any SDG and ostensibly reduces with regard to the first ones.

The representation of the Cooperative Principles of Concern for Community, and of Equality are also highlighted as transversal axes of the remaining cooperative principles and a good set of SDGs. This is what follows when applying the analysis of main components to the matrix of relationships between the cooperative principles and SDGs.

Finally, a clustering is obtained from the cooperative principles (SDGs), which offer a certain taxonomy of possible relationships between the components of both dimensions. Belonging to the same cluster means that properties are shared. Thus, 4 groups of nodes are obtained. Their distinguishing features are the following ones:

- 1- Strong transversality. This grouping constitutes the strongest cross-cutting relationships and interdependencies between cooperative principles and the SDGs.
- 2- General collateral transversality. This grouping of relationships is configured on the positive externalities of cooperativism towards the more general environment.
- 3- Specific collateral transversality. This cluster is configured on positive externalities of cooperativism towards its more specific environment.
- 4- Implicit transversality. This grouping of relationships supposes potential effects of internalization towards cooperativism as an institution.

Conclusions

Once the network analysis is carried out, it is possible to derive a close relationship between the Cooperative Principles and the aims of the SDGs, and as far as the Colombian model is concerned, there is evidence that cooperatives contribute to the fulfillment of the SDGs by virtue of the enhancement of their principles. The questionnaire survey implemented to 16 Colombian cooperatives shows, for instance, that cooperatives generate between 10 and 15 percentage points of STK (expanded) on average to groups that cover diverse stakeholders.

The findings emphasize that principles such as Concern for Community, and Education, Training, and Information, to mention some, are more related to the fulfillment of the SDG goals and, therefore, the practices carried out in response to these principles will tend to generate more transversal contributions. But this does not undermine the importance of the other cooperative principles as they play a part in the organizational environment of multiple actors making up the cooperatives. In this way, the findings reinforce cooperative identity as a core element to direct contributions of cooperatives to the decisions made under Agenda 2030.

Original Value and Limitations

The work notes that, at this time and because of partiality, it is feasible to reach consensus on micro, meso and macroeconomic indicators to perform comparative and differentiated analyzes regarding each geography aimed at giving a usefulness to Social Balances as an instrument for the construction of Public Policies. Therefore, there are still enormous challenges such as working on tools that allow bundlings between individual social balances, promoting criteria to value the release of resources generated by the differentials that cooperative members obtain for their transactions with their cooperative in relation to market prices, quantifying social surpluses defined as those goods and services that cooperative members get from non-monetary actions and valuing preferred assets.

To optimize the report about the contributions of cooperatives to the SDG goals, it is possible to appeal to the addition of data to the social balance and to meso-economic aggregation tools. Then, once both link to certain “optimal” indicators in the macroeconomic dimension and summarize the economic and social circuit of the activity concerned with SSE entities, particularly that of cooperatives, as a kind of satellite accounts. It would be advisable to focus especially on the calculation of the levels of the Use of Disposable Income Account and Use of Adjusted Disposable Income Account in National Accounts, which are those that concentrate themselves on the STK treatment.

For reasons of time and cost, it has not been possible to extend the number of experts per country to achieve the interrelationship networks between cooperative principles and SDGs for a wide range of countries, which would have provided the comparability component always required in the applied research. Consequently, the Delphi method could have been applied to a survey with the SSE entities’

stakeholders and not only to cooperatives. With this, it is not possible to generalize conclusions that are only valid in the cultural, territorial and sectoral environment already described and for the theoretical proposal already pointed out.

KEYWORDS: Sustainable Development Goals, Cooperative Principles, Social Balance, Social Networks Analysis, Social transfers in kind.

1. Introducción

El 18 de diciembre de 2009, en el marco de la 65ª sesión plenaria de la Asamblea General de las Naciones Unidas, se aprueba la Resolución No. A/RES/64/136: Las cooperativas en el desarrollo social (ONU, 2010). En dicha Resolución se reconoce que las cooperativas promueven la participación de las personas en el desarrollo socioeconómico y tienen potenciales para contribuir al logro de los objetivos globales en torno al desarrollo sostenible.

Por esta singular asociación de intereses entre las Naciones Unidas y el movimiento cooperativo internacional se proclamó el año 2012 como el *Año Internacional de las Cooperativas*, alentando a los gobiernos a fomentar de manera articulada a las empresas cooperativas en sus territorios y presten especial atención a la contribución de las cooperativas en la aplicación y seguimiento de los principales tratados internacionales en pro de la sostenibilidad planetaria.

De estas iniciativas destacan estudios que señalan una relación positiva entre el fomento de cooperativas y el desarrollo de prácticas para satisfacer los ODS (ONU, 2014; OIT-ACI, 2014, Martí, 2016; Álvarez, Zabala y Orrego, 2016) que apuntan al logro de la sostenibilidad de manera integral.

El problema estriba en que para los ODS se han desarrollado herramientas de seguimiento institucional que reportan los esfuerzos que hacen los Estados para cumplirlos (ONU, 2018), pero no hay un registro de las herramientas para identificar el aporte de organizaciones como las cooperativas que, a pesar de no estar articuladas con el Estado, desarrollan prácticas que contribuyen al cumplimiento de las metas de éstos (OIT-ACI, 2014). De hecho, varias iniciativas logran ser desarrolladas por el accionar de cooperativas en ciertos territorios (CES-España, 2016; Salathé-Beaulieu, *et al.*, 2019) sin que necesariamente se ajusten al cumplimiento de pactos, acuerdos y tratados en los que la percepción es que no son vinculantes.