REPRESENTATION AND EVALUATION OF THE GLOBAL PERFORMANCE OF COOPERATIVES

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ABSTRACT
Global performance, defined as “the aggregation of economic, social and environmental performance” (Baret, 2006), is a multidimensional concept that was introduced with the emergence of the concept of CSR and sustainable development. Today, the difficulty for organizations is to measure global performance and understand the interactions between its different dimensions: economic, social and environmental. The search for global performance has become increasingly important for any organization to affirm its relevance, effectiveness and efficiency in meeting the expectations of their stakeholders in order to ensure its sustainability. Cooperatives are no exception to this logic. Assessing the performance of cooperatives takes on new importance given all the challenges they will have to face and given their dual nature (association/enterprise). The objective of this article is to propose a model of representation and evaluation of the global performance of cooperatives allowing to describe the components of this performance and to analyze the interactions between its different dimensions.

Keywords: Global performance, cooperatives, conceptual model.
Introduction

Current performance is at the core of the scientific literature on management. In practice, we find that the concept of performance is a portmanteau, a multidimensional concept (Salgado, 2013), the meaning of which depends on the context in which it is used. Moreover, the concept of performance is central to the assessment approaches of private, public and social organizations. However, this assessment has always been unidimensional, based solely on financial indicators, in order to create value for shareholders. This segmented vision of performance has been subject to various criticisms, thus making it possible to broaden the design, representation and measurement of performance, which has contributed to the emergence of the notion of global performance.

The purpose of this paper is to contribute to understanding the notion of global performance and to shed light on its dimensions through an extensive literature review enabling the construction of a conceptual model for the representation and assessment of the performance of global cooperatives. Thus, the article is divided into four sections. The first part focuses on defining the concept of performance, while the second deals with the emerging and evolving concept of global performance and its determinants. The third part is dedicated to the analysis of global performance measurement tools. Finally, the fourth part is dedicated to the analysis of the global performance of cooperatives and provides a conceptual model that will then be tested on a representative sample using a quantitative approach.

1. Performance, a concept with multiple definitions

The concept of performance poses definitional challenges. Since the 1980s, many authors have tried to define this notion, but no shared or unanimous vision has yet to be found.

Based on an extensive literature review, we try to present a summary of the main definitions of the concept of performance in order to reduce the ambiguity around this concept.

Origin and evolution of the notion of performance

The term performance dates back to the 15th century, when it first appeared in English as Perform, which itself comes from the ancient French Parforme which is probably derived from the Latin word perficere and means, "do completely, complete", that is, fairly close, in current French, to the perfect verb, that is, "accomplish, execute". Thus, the word performance has its origins in French, to which it returned in the 19th century, after a detour “across the Channel” (Pesqueux, 2004). At that time, the word translated, on the one hand, the results registered by a horse during a race and, on the other hand, the success obtained in this race. Then, and during the 20th century, the meaning evolved to designate both the results and the sporting achievement of an athlete or even the possibilities of a machine to achieve exceptional performance. In this context, the concept of performance, according to French perspective, reflects the outcome of an action, the success or the achievement achieved. Contrary to its French meaning, the concept of performance in English "simultaneously contains the action, its
result and possibly its outstanding success" (Bourguignon, 1995).

The polysemous nature of performance

In the field of management, the ambiguity of the concept of performance has always been the subject of several works and studies by different authors which attempt to define it.

We start by presenting the definitions proposed by the management dictionaries and glossaries:

- According to Le Grand Dictionary Larousse, performance refers to an English word meaning "execution, completion; by extension, exploitation". This definition means that the objectives pursued are achieved;
- The Oxford dictionary defines performance as being: “the accomplishment, execution, carrying out, and working out of anything ordered or undertaken; the doing of any action or work; working, action”. Here, the accent is placed on the results that one seeks to achieve than on the means to be used to achieve them;
- The Robert dictionary also agrees with the previous definitions and links performance to "the feat of a team in an event";
- In the lexicon of management, performance refers to an indicator for measuring the degree of achievement of the goals, objectives, plans, programs that the company has set”;
- According to the AXCION lexicon, performance is the result obtained in a specific area and considered as a victorious outcome. It can be the result of a human action or that of a material or a process, etc. To be appreciated, it is subject to measurement.

From the review of the definitions proposed by the dictionaries and lexicons of management, we can see that they all refer to efficiency, since they generally insist on the achievement of objectives.

To complete these aforementioned definitions, we deal in the following table with the definitions given by the main authors of the field studied.
Table 1: definitions and perceptions of performance

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definitions and perceptions of performance</th>
<th>Common aspects</th>
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<tbody>
<tr>
<td>Seashore SE and Yutchman E., (1967)</td>
<td>Performance is the capacity of an organization to exploit its environment in the acquisition of rare and essential resources for its operation.</td>
<td>Performance is broken down in terms of efficiency, effectiveness and relevance. Effectiveness reflects the ability of an organization to achieve the expected results, it is thus the link between the results obtained and the objectives set, efficiency is the optimization of the means to achieve an objective, and relevance reflects the articulation between the resources allocated and the objectives it has set itself.</td>
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<td>Khemakhem , (1976)</td>
<td>Performance is an accomplishment of a job, act, work or exploit and the manner in which an organization achieves its designated goals.</td>
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<td>Gilbert, (1980)</td>
<td>Performance is represented by a triangle. The segment between objectives and results defines effectiveness, the segment between results and means defines efficiency, and the segment between means and objectives designates relevance.</td>
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<tr>
<td>Book (1986, 1994)</td>
<td>Performance is the set of processes and devices which, in organizations, guide decisions, actions, behaviors to make them consistent with long and medium-term objectives, and which are based on information systems.</td>
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<tr>
<td>Burlaud , (1995)</td>
<td>Performance represents the level of achievement of objectives</td>
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<tr>
<td>Brasseul , (1998)</td>
<td>Performance is the ability of a company to produce and control its costs.</td>
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<tr>
<td>Berrah , (2002)</td>
<td>A successful company is a company that achieves the objectives it announces.</td>
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<tr>
<td>Bessire , (1999)</td>
<td>It integrates the issue of performance into a dynamic three-dimensional triptych: the political, subjective dimension is that of relevance, the strategic, rational dimension is that of coherence, and the performance dimension, that of objectification, is presented by Bessire as that of economics and management.</td>
<td></td>
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<tr>
<td>Tahon , (2003)</td>
<td>Performance is linked to a referent: the objective to be achieved, but also to action variables, means and results.</td>
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<tr>
<td>Stefan Tangen , (2004)</td>
<td>Performance is the set of measures used in quantifying the efficiency and effectiveness of an action.</td>
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<tr>
<td>Paturel , (2007)</td>
<td>The 3F model defines the notion of performance according to three areas of achievement: F1 (effectiveness), F2 (efficiency), F3 (effectiveness).</td>
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<tr>
<td>Platet- Pierrot, (2009)</td>
<td>Performance relates both to the optimization of resources in their use, but also to the management of strategic objectives.</td>
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<tr>
<td>Author(s)</td>
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<td>Quinn and Rohrbauch, (1981)</td>
<td>Performance is a construct and not a concept.</td>
<td>Performance is analyzed as a construct</td>
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<tr>
<td>Naro, (2005)</td>
<td>Performance does not exist as an objective reality; it is the result of a social construction.</td>
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<tr>
<td>Payette, (1988)</td>
<td>Performance is a concept defined in different ways, depending on values, training, status and experience of evaluations.</td>
<td>The apprehension of performance is contextual. The difficulty of understanding this term is due to its great polysemy, and its multi-use in various disciplines. Therefore, the definition of the term depends on the context in which it is used and has as many meanings as there are individuals or groups who use it.</td>
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<tr>
<td>La Villermois, (1998)</td>
<td>La Villermois distinguishes between two main visions of performance: that which is objective, economic or rational, and that which is attached to the subjective or to the political.</td>
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<tr>
<td>Chankam, (1998)</td>
<td>The plurality of disciplines and fields interested in performance each offers, in its own language, a way of naming, describing and explaining this notion.</td>
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<td>Pesky, (2004)</td>
<td>The word performance means both accomplishment of a process, of a task with the results that flow from it and the success that can be attributed to it.</td>
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<tr>
<td>Saulquin and Schier, (2007)</td>
<td>The concept of performance has as many meanings as there are individuals or groups who use it. The multiplicity of possible approaches makes it an overdetermined concept, and curiously, it remains indeterminate because of the diversity of the groups that make up the organization.</td>
<td></td>
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<tr>
<td>Salgado, (2013)</td>
<td>Performance is a portmanteau, a fuzzy and multidimensional concept that ultimately only makes sense in the context in which it is used.</td>
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</table>
From the table above, we see that the majority of authors perceived performance in terms of effectiveness and efficiency. At the level of this article, we retain, to define the performance of an organization, the achievement of the objectives set and the optimization of resources in the process of achieving these objectives. This definition evokes, at the same time, effectiveness, efficiency and relevance.

**From performance to global performance**

Historically, performance has been one-dimensional and studied solely from a financial perspective. This performance concept takes into account the satisfaction of shareholders' expectations (Shareholders approach). Maximizing profitability, profit and return on investment was the ultimate goal for organizations to ensure their sustainability.

This purely financial perspective has been subjected to enormous criticism. Indeed, and for several years, the logic of performance representation has moved from a financial vision to a more global vision integrating social and environmental concerns. The appearance of other actors (stakeholders = Stakeholders approach) has upset the apprehension of the notion of performance, which has experienced renewed interest with new acceptances. From now on, the sustainability of organizations no longer stems only from the satisfaction of shareholders' expectations, but also includes the satisfaction of other stakeholders. Therefore, the latter require a response to their expectations, and this response is a vital condition for achieving performance and therefore the sustainability of organizations. Marmuse (1997) specifies, “Performance has (...) multiple aspects, undoubtedly convergent, but which deserve to be approached in a more global logic than the sole assessment of profitability for the company or for the shareholder” (p. 2194). It is in the sense that the concept of global performance makes its appearance.

**The emergence of global performance**

The notion of global performance surfaced in Europe during the 20th century with the emergence of the concept of sustainable development, but its origins go back to older concepts, namely, social responsibility. In this section, we would like to present the contribution of CSR and sustainable development to the emergence of the concept of global performance.

**From financial performance to societal performance**

The concept of societal performance appeared with the advent of social responsibility (CSR) and the appearance of new actors called "stakeholders". CSR is a concept that was introduced in the United States by Carroll (1979), and defined it in 1999 as the ability of an organization to respond to social pressures. For the European conception of CSR, the European Commission defines it as “the voluntary integration, by companies, of social and environmental concerns into their commercial activities and their relations with their stakeholders” (Green Book, July 2001, p. 8). Freeman (1984) defines stakeholders or “stakeholders” as any group or individual who can influence or be influenced by the company's activity. In this context, CSR allows organizations of all sizes to participate in reconciling economic,
social and environmental objectives in cooperation with their partners (COM, 2006, p.136). On this basis emerged the notion of societal performance, which is expressed by the intersection of three dimensions: the principles of societal responsibility (economic, legal, ethical and discretionary), the philosophies of responses to the societal problems that arise (ranging from denial to anticipation) and the societal domains in which the company is involved (Dohou and Berland 2007).

Drawing on the work of Carroll, Wood (1991) defines societal performance as "an organizational configuration of principles of social responsibility, processes of societal sensitivity, and programs, policies, and observable outcomes that relate to the societal relationships of the company". This definition made it possible to operationalize the concept of societal performance (henceforth CSP) already mentioned by Carroll. However, and with the aim of overcoming the difficulty of using the previous definitions, Clarkson (1995) proposed to proceed by an approach based on the actual functioning of organizations. Therefore, retaining the framework of stakeholder theory, CSP is defined as the ability to manage and satisfy Stakeholders (Gond, 2003).

From sustainable development to global performance

For some time, and all over the world, we have been witnessing the emergence of many initiatives aimed at rewarding organizations that have committed themselves to a process of social responsibility. The objective is to encourage these organizations to change their behavior and to subscribe to a policy of sustainable development (SD). This notion appeared expressly in the 1980s, after the establishment of a commission on the environment and development. In 1987, this commission (called the Brundtland Commission) defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet theirs”. The implementation of the principles of sustainable development at company level must be done through social responsibility. SD at the level of organizations is often declined by a triangle, which highlights the three aims pursued: one is economic (creation of wealth for all through sustainable production and consumption methods), the other is ecological (conservation and management of resources) and the third is social (equity and participation of all social groups) (Dohou and Berland 2007). The principle of SD is to reconcile the three dimensions to ensure that the pursuit of one purpose is not to the detriment of the other two. It is in the sense that "the concept of global performance is mobilized in the managerial literature to assess the implementation of sustainable development strategies by companies" (Capron and Quairel, 2005) and to justify their societal responsibilities vis-à-vis - vis-à-vis the various stakeholders.

Definition and determinants of global performance

The emergence of the concept of global performance is based on the work of the General Planning Commission's working group (Capron and Quairel, 2005), which dates back to 1997. The main contribution was that of Marcel Lepetit (organizational consultant and expert), who defined global
performance "as a multidimensional, economic, social and societal, financial and environmental aim (or goal), which concerns companies as well as human societies, as well as employees than the citizens" (p. 64). Thus, global performance is broken down according to multi-criteria indicators and by various players and is no longer measured according to a single dimension. Therefore, the relationships maintained between organizations and their environment, whether natural or societal, must be analyzed and evaluated (p. 81).

Currently, global performance is mobilized in managerial literature to assess the deployment of the concept of sustainable development by organizations (Capron and Quairel, 2005). Thus, Baret (2006, p.2) and Reynaud (2003, p.10) define this global performance as “the aggregation of economic, social and environmental performance”. In addition, for Germain and Trébucq (2004) a performance is formed “by the combination of financial performance, social performance and societal performance”. In this context, global performance consists of integrating the three performances in a synthetic approach, and “this integration implies consistency between the three dimensions with causality models linking different factors from different dimensions ” (Capron and Quairel -Lanoizelée 2010, p.7).

Although debates reveal different acceptances between organizations (private sector, public sector and the social and solidarity economy) and between the Anglo-Saxon and European conception (Acquier and Aggeri 2007), producing a confusion and ambiguity of the concept (Pesqueux 2004), we can affirm that the global performance rests on a theoretical foundation postulating a societal responsibility towards the stakeholders, taking into account the provisions of sustainable development. Thus, in our article, we opt for the most frequent definition and that proposed by Reynaud (2003): “global performance is the aggregation of economic, social and environmental performance”.

Now, the definition of the notion of global performance is specified, the problem posed concerning its measurement. Currently, the evaluation systems implemented do not integrate in a balanced way the economic and financial, environmental and social dimensions, which does not cover a wider scope of impacts (Capron and Quairel, 2005). These devices evaluate performance separately or tend to measure, at best, the intersection of two dimensions of performance.

In the next section, we present the set of tools and models proposed for the evaluation of global performance.

**Global performance measurement**

We can only speak of a performance if we can measure it (Bourgignon, 1995). In this sense, several initiatives have been developed with the aim of evaluating the global performance of organizations by taking into account the three dimensions of sustainable development. However, and given the complexity of the notion of global performance, due to its multidimensional nature, no measurement model, integrating the three dimensions of sustainable development, has been designed so far. Organizations, to measure their performance, are content to use tools that measure, separately, each dimension of SD. For our study, we only deal with the tools for measuring global performance, namely:
the Balanced Scorecard, OVAR method, Triple Bottom Line reporting and GRI reporting.

The Anglo-Saxon method: the Balanced Scorecard (BSC)

Introduced by Robert Kaplan and David Norton in the United States in the early 90s, the Balanced Scorecard (Balanced Scorecard) is designed as a response to criticism of traditional performance measurement tools, which focus solely on financial indicators. The BSC aims to promote a choice of financial and non-financial indicators in order to provide a balanced view of performance. The model offers indicators structured along four dimensions, including financial results, customer satisfaction, internal processes and learning. Kaplan and Norton's model is based on a causal link between its four dimensions. Indeed, the financial axis constitutes the final goal of the organization; its achievement depends on the satisfaction of the customers, itself conditioned by the good organization of the internal processes, which suppose the motivation of the actors and the performance of the systems of information. Of course, the BSC brought the novelty of taking into account non-financial indicators for the evaluation of performance (Berland, 2007), however, it was subjected to numerous criticisms. The model remains attached to the traditional version of performance, namely the pursuit of economic and financial objectives, given the hierarchy established between the four dimensions for the satisfaction of shareholders’ expectations. As a result, the BSC, in its initial version, cannot constitute a tool for measuring global performance and requires adaptations to take into account changes in the notion of performance. In this sense, many authors have learned to propose a version that takes into account the requirements of the CSR and the SD. In 2001, Hockerts proposed Sustainability Balanced Scorecard (SBSC) through the update of the BSC by adding indicators measuring environmental and social performance, but this tool remains oriented towards financial objectives. For Kaplan and Norton (2001), they considered that the citizenship of the organization constitutes an integral part of the dimension of the internal processes for the measurement of the performance and integrated all the partners of the organization to the axis customers. . This version was also considered to be geared towards satisfying shareholders' expectations. Bieker (2002) proposed a new adaptation of the BSC by adding a fifth societal dimension to it, without as many details concerning the structure and implementation of the performance measurement system (Germain and Trébucq, 2004). As for Supizet (2002), he set up the Total Balanced Scorecard (TBSC), which is based on a series of six causal relationships between stakeholders, namely: customers, suppliers, shareholders, users, staff, partners, the community and the organization itself. Even as a legal entity. Similarly, the TBSC has been subject to various criticisms based on a synthesis of works, which have shown that the organizations most concerned with their customers and their suppliers are exposed to greater financial risks, particularly in times of recession (Germain and Trebucq, 2004, p. 40).

In short, it can be said that despite the evolutions that the BSC model has undergone, the integrated evaluation of
global performance remains very problematic, and not all the adaptations of the model to the field of CSR and SD have allowed real changes in the habits of leaders. Now, the scope of financial indicators remains dominant and non-financial indicators are considered unreliable for managers.

**The Triple Bottom Line reporting**

The Triple Bottom Line (TBL) concept adheres to the broad movement pursuing the measurement of the global performance of organizations in the light of sustainable development. The TBL was developed and popularized by John Elkington (1997) in his book "Cannibals with Forks", in which he took into account the financial result, as well as the social and environmental balance sheet of the organization, thus introducing a new accounting and managerial model making it possible to go further from the classic measurement of economic profit at a more global measure integrating the social and environmental aspect.

The expression TBL refers to the Bottom Line (the last line of the balance sheet), i.e. the net income statement. She is interested in the calculation of the triple result under the three “P”: “People, Planet, and Profit”. In 2006, Andrew Savitz, published in his book "The Triple Bottom Line", in which he gave the following definition of the concept: "The Triple bottom line captures the essence of sustainable development by measuring the impact of activities of a company in the world both in terms of profitability and value for shareholders and in terms of social, human and environmental capital".

It is therefore a question of measuring global performance according to its contribution to economic prosperity (economic bottom line), to social capital (social bottom line) and to the quality of the environment (environmental bottom line). In this sense, Dohou and Berland (2007) grant the TBL notion two acceptances, a narrower one, considering the notion as a framework contributing to the measurement of results based on economic, social and environmental data. The other acceptance is broader, refers to the set of values, points, and processes that a company must observe to minimize any damage arising from its activity and to create economic, social and ecological value. This implies that the organization takes into account the expectations of all its stakeholders (shareholders, users, customers, employees, beneficiaries, partners, governments, local authorities, local communities and the public).

The TBL model proposes a correlation between the three Bottom Lines. Indeed, the social depends on the economic, which itself depends on the ecological. The three bottom lines are therefore unstable and dependent on each other. They are constantly changing due to social, political, economic and environmental pressures. As a result, the objective of sustainable development as a whole is to apprehend the issues in a global and integral way, which constitutes a difficulty for organizations to analyze their positive and negative impacts in relation to the synthesis of the three bottoms lines. This observation constitutes the main criticism addressed to the TBL, given its segmented conception of the measurement of global performance. In practice, the analysis is carried out separately according to three dimensions
(economic, social, environmental), which will subsequently be compiled without taking into consideration the interdependence relationships that exist between them. It is a simple translation of the three dimensions of sustainable development at the level of the Triple Bottom Line model without representation of the causal links. As specified by Dubigeon (2002), a notion of integration is missing, which is very important for the expression of the relationship between the performance of the organization and its global balance sheet.

The Global Reporting Initiative (GRI)

Creating in 1997 through a partnership bringing together the Coalition for Environmentally Responsible Economies (CERES) and the United Nations Environment Program (UNEP), the Global Reporting Initiative (GRI) is the most widespread reporting model for assessing the efforts made by organizations in terms of sustainable development. The GRI is an international, independent, not-for-profit organization that brings together businesses, NGOs and other stakeholders. Its mission is to provide a set of guidelines for reporting on the degree of performance of organizations from an economic, social and environmental point of view.

The GRI guidelines appeared in 2000, then revised and modified in 2002, 2006, and 2013 to form the subject of the so-called G4 version. Currently, the GRI G4 guidelines have been widely disseminated and are used by various organizations for their CSR and SD reporting.

However, and since October 2016, the GRI's G4 has been revisited to strengthen the transparency of organizations in terms of CSR and SD. The objective is to improve the clarity of reporting, its readability and application within organizations for better decision-making. The GRI G4, replaced by the new GRI standard, now constitutes an international standard for structuring the CSR and sustainable development reports of organizations according to four series. Series 100: dealing with compliance with the universal principles of reporting (GRI 101, GRI 102 and GRI 102); Series 200: dealing with economic subjects (GRI 200); Series 300: addressing environmental topics (GRI 300), and finally Series 400: dealing with social topics (GRI 400). The compliance of organizations' reports with the new GRI standard version was on July 1, 2018. This change did not have significant impacts for organizations using the old GRI G4 version, given that the topics covered, and the key concepts remain the same.

In short, the GRI is a real tool encouraging organizations to respect the standards of the CSR and SD, thus allowing the continuous improvement of their global performance. However, and despite the changes and progress that this model has undergone, the GRI standard suffers from certain limitations, which constitute avenues and challenges for improvements for the next versions. Indeed, this frame of reference does not give a global and integrated result using sustainability indicators (SD). It contents itself with proposing an exploitable battery of quantified quantities, the relevance and construction of which are delegated to experts, without dealing with the hidden conflicts between the dimensions of the DS. In this sense, the managerial literature insists on the importance of the interaction of the impacts of the three dimensions of sustainable development.
development to measure global performance. Consequently, it is essential to add axes dealing with integrated performance and to draw up, in consultation with the stakeholders, a list of indicators allowing the measurement of this integrated performance. However, it is not only a question of interposing or crossing indicators, but of analyzing the cause and effect relationships between all the dimensions. It is in this sense that several organizations have undertaken to set up integrated reporting frameworks and standards. The best known is the Reporting Integrated (IR) set up by the International Integrated Reporting Council (IIRC).

Based on the review of global performance measurement models, we find that none of these measurement tools has proposed to integrate the three dimensions of sustainable development and to provide a global and integrated conception of global performance. Indeed, these models have theoretical and methodological weaknesses, starting first from the ambiguity of the proposed definitions of the notion of performance, passing through the segmented and hierarchical vision of its dimensions, and finally the simplicity of the statistical methods used, which do not make it possible to grasp the complexity of the interactions between the various components of performance. In the following part, we propose a model for representing global performance that takes into account the dimensions of sustainable development and the interactions that exist between these three dimensions. The model will be designed for cooperatives.

The global performance of cooperatives

The social and solidarity cooperatives economy is considered as a form of economy that is different from the capitalist economy and the public economy. It manifests itself in a dynamic of social change and sustainable development in order to confront the economic, ecological and social crises observed on an international scale. The SSE strives to reconcile the principles of equity and social justice with economic development, thus bringing the vitality of economic dynamics into line with the humanistic principles and objectives of development. SSE is the third pillar on which a balanced and inclusive economy must be built with the public and private sectors. This economy has the potential and the means to mobilize and create significant material as well as intangible wealth. Cooperatives are the core of the social and solidarity economy, since they contribute to the sustainable development of nations by improving living conditions of their members, the development of local wealth, the creation of employment, the dynamic territories, etc. The purpose of our paper is to propose a model for representing and measuring the global performance of cooperatives to highlight the contribution of these organizations to sustainable development.

Cooperatives, the main component of the social and solidarity economy

In Morocco, and according to Article 1 of Law No. 112 -12, the cooperative is defined as "a group of natural and/or legal persons who agree to come together to create a business, allowing them to satisfy their economic and social needs, and which is managed in accordance with globally..."
recognized core values and principles of cooperation, including:

- Voluntary and open membership;
- The democratic power exercised by the members;
- Economic participation of members;
- Autonomy and independence;
- Education, training and information;
- Cooperation between cooperatives;
- Commitment to society.

Three categories of cooperatives exist. The first category refers to cooperatives to which members provide products for resale after processing or services for providing them. The second category includes co-ops that produce goods or deliver services for the benefit of their members. Finally, there are cooperatives, which offer a remunerated activity for the benefit of their members. However, a cooperative may carry out two or three classes of activities simultaneously.

In Morocco, the cooperative fabric is a fundamental component of the national economy and plays a pivotal role in economic, social and environmental development. Since independence, the cooperative economic model has been a strategic choice to modernize traditional sectors, including agriculture and handicrafts. On the institutional level, the creation of the Office for the Development of Cooperation in 1962 and it is restructuring in 1975 allowed the cooperative movement to have a clearer legal framework. However, it was only in the 2000s that the co-operative sector began to play a significant role, particularly with the launch of the NHIDI, which fosters the creation and sustainability of social and support economic structures (Ahrouch, 2011).

Cooperatives facing performance challenges

Cooperatives now play a vital role in the economic and social development of countries, taking into account their contribution to combating poverty and exclusion the improvement of the living conditions of the populations to mobilizing and preserving resources to the promotion of investments and the creation of wealth and their equitable, fair distribution, thus promoting economic inclusion and social integration for their members and community. In this way, cooperatives distinguish themselves by their ability to reconcile the economic and the social in compliance with the principles of cooperation, which gives them legitimacy and loyalty in comparison with other types of organizations. In this regard, cooperatives are recognized internationally by their identity based on their definition, values and principles, which guide their cooperative actions. This cooperative identity is a source of competitive advantage for these organizations against a changing environment characterized by rising capitalist and international competition, stagnation or even slowing growth rates, maturity of markets, increasing pressure on prices, increasing costs, increasing demands for sustainability, etc. In that context, cooperatives need to develop an appropriate management model allowing the construction of an alignment between their values and their aims, the basis of the management model and the performance indicators. According to Côté (2018), this business model, known as the cooperative business model, must meet the challenge of differentiation in the cooperative reflect the values and goals that are central to its purpose, while
demonstrating its ability to compete and support a sustainable strategic position to achieve its goals and outcomes?

To address the challenges facing cooperatives, Daniel Côte (2018) proposed, considering their cooperative duality (business association), a cooperative business model based on the new cooperative paradigm and case studies of many successful cooperative business models. This business model aims at mobilizing by the values and practices of human resources management, marketing, management and high performance strategy.

The author notes that the cooperative balance management model is intended to bring cooperative values and principles into management practices that are more democratic than corporations to promote the strengthening of the stability of the cooperative mode of organization from a dynamic point of view.

Thus, cooperative business practices are situated between, on the one hand, associative practices favoring social cohesion among members through practices of information, training, consultation and decision-making. On the other hand, business practices that creates value and gain a competitive advantage over capitalist competitors. These business practices are essential for achieving performance.

As a result, cooperatives differ from conventional enterprises in their cooperative and participatory status, and thus in their democratic functioning. These organizations are therefore forced to seek, beyond economic performance, social performance, materializing through their associative practices (Côté, 2007), in terms of education, training, consultation, and decision-making practices. In addition, cooperatives operate in a broad external environment that includes many stakeholders. (As interpreted by Freeman 1984) such as co-operative networks, other ESS structures, local and/or national institutional actors, or even competition organizations. This integration into many networks implies a quest for societal and/or environmental performance (in the broad sense) in order to meet the expectations of external stakeholders and meet the responsibility of the Cooperatives towards them.

In the light of all these characteristics related to the dual identity of cooperatives, it is therefore stressed that they are intrinsically oriented towards the quest for overall performance (Maurel and Tensaout, 2014), defined to be the aggregation of economic, social and environmental performance. Global performance and management then reflect organizations’ sustainable development strategies and social and societal responsibilities (Capron and Quairel-Lanoizelée, 2007).

Proposal for a representative and evaluation model of global performance of cooperatives

The objective of our article is to propose a model to represent and measure the global performance while building on all the tools already discussed in the third part. Thus elucidating the content of the cooperative's overall performance, and understanding the causal relationships between its different dimensions. For this purpose, we used structural modelling using a conceptual model allowing a simultaneous estimation
of several dependence relationships between the studied variables.

**Mobilizable theories**

In developing our conceptual model for representing the overall performance of cooperatives, we referred to a diversified theoretical framework based mainly on stakeholder and resource based review (RBV) which allowed us to base our comments and consolidate our model. In fact, the complementarity of the two theories has contributed to the definition of global performance as a multi-dimensional construction involving the aggregation of indirect impact of the practices of the organizations.

**Specification of the conceptual model**

In the light of the literature review on the notion of global performance, and based on the co-operative equilibrium model, we have developed a specific model for cooperatives to represent their performance.

**Figure 1: Model for representing the global performance of cooperatives.**

**Definition of constructs**

This essential phase of delimitation of the content of the different constructs of the conceptual model is essentially based on the literature.

- **Economic performance (EP):** three types of profitability measure it, because the literature presents a great diversity of definitions and several types of indicators are used (Brammer and Millington 2008). We have retained “accounting” measures of performance.
to facilitate comparisons based on profitability (Berman et al. 1999). For this, we mobilize three ratios generally used to assess performance (Hart and Ahuja 1996) and aim to obtain a comparable measure: economic profitability measured by ROA (Return on Assets) or ROCE (Return on Capital Employed), profitability financial measure measured by the ROE (Return on Equity) and the commercial profitability via the result compared to the turnover.

✓ **Social performance (PS):** It also includes different variables: according to Savall and Zardet (2001) "social performance is defined by the degree of satisfaction of the actors", and according to J. Gadrey (2003), it refers to the achievement of social utility in the context of SSEOs. We take up these ideas, measuring by four themes of social utility, namely: democratic functioning (DF), territorial anchoring (TA), social impact (SI), and social innovation (INNOV).

✓ **Environmental performance (ENVIR):** this dimension is concerned with the assessment of the efforts made by organizations to protect the environment. GRI Standards address it in its GRI 300 component, which establishes guidelines for the design and use of environmental performance evaluation.

✓ **Global performance (GP):** This construct is by definition multidimensional. Given its complexity, we have retained its social, economic and environmental determinants. In this sense, we have integrated economic, social and environmental performance indicators to measure this global performance.

### Research hypotheses

We retain a general hypothesis which states that global performance is a multidimensional construct, it is determined simultaneously by the explanatory variables: economic, social and environmental performance (level II) and, indirectly, by economic, social and environmental indicators (level I).

From our preliminary conceptual model, and based on the definition of global performance by Reynaud (2003), while taking into account the nature of the organizations studied and the theories mobilized, we deduced the following hypotheses:

**H1:** the global performance of cooperatives is a multidimensional construct, determined simultaneously by economic, social and environmental performance

**H1.a:** economic performance significantly and positively influences global performance.

**H1.b:** social performance significantly and positively influences global performance.

**H1.c:** environmental performance significantly and positively influences global performance.

**H2:** economic performance significantly and positively influences social performance

**H3:** economic performance significantly and positively influences environmental performance

### Justification of assumptions

- **Justification of the impact of the economic, social and environmental dimensions on the global performance**
Referring to the definition proposed by Baret (2006) and Reynaud (2003), global performance is the aggregation of economic, social and environmental performance. It results in the combination of economic performance, social performance and societal/environmental performance (Germain and Trébucq, 2004). In this context, the global performance consists in integrating the three performances in a synthetic approach, and this integration implies a coherence between the three dimensions with causality models linking different factors from different dimensions (Capron and Quairel-Lanoizelée, 2010).

- Justification of the link between economic performance and social performance
  - Economic performance positively influences social performance: This hypothesis is based on the stakeholder theory that social performance would have a positive impact on economic performance. Indeed, SP is an indicator of the organization's ability to effectively meet the demands of various stakeholders. This is likely to regain their support and therefore improve profitability (Balabanis et al., 1998). In this sense, the more an organization satisfies its PPs, the more it will gain their support, and the higher its level of performance will be (Clarkson, 1995; Rowley and Berman, 2000). Waddock and Graves (1997) speak of "Good Management Theory " according to which there is a high correlation between good managerial practices and PS, simply because an improvement in social activity leads to privileged relations with " key stakeholder groups" (Freeman, 1984), thus implying more performance. Specifically in the context of the SSE, funders as less risky and more financially successful in achieving social goals (Waddock Graves, 1997) will view the most socially successful organizations.

There is a line of work that confirms the existence of a positive link between the two concepts (McGuire et al., 1988; Waddock and Graves, 1997; Preston and O'Bannon, 1997; Verschoor, 1998; Stanwick and Stanwick, 1998; McWilliams and Siegel, 2000; Moore, 2001; Ruf et al., 2001; Orlitsky et al., 2003; Simpson and Kohers, 2002; Ngwakwe, 2009; Rettab et al., 2009; Gadioux, 2010; Wang, 2010; Mustaruddin, et al., 2011; Baird et al., 2012). Allouche and Laroche (2005) report that out of the 82 studies listed, 75 of them found a positive link, this is the case of Margolis and Walsh (2003) who count 54 out of 127 studies confirming the positive link.

- Economic Performance Positively Influences Social Performance: The Excess Resources Hypothesis “Slack Resources Hypothesis”: Proponents of “Slack Resource Theory” suggest that economic/financial performance determines the extent of SP. Past economic performance provides surplus funds that can be channeled into future social activities. If the organization has additional resources, it can allocate those more to excel in the social field (Waddock and Graves, 1997). Similarly, if an organization, such as the SSEO, whose social purpose is its reason for existence, it will have to have the funds necessary to play this role (Preston and O'Bannon, 1997). This hypothesis, also called " available funds hypothesis", sets out to show that economic/financial performance is a necessary condition for the implementation of the social mission (McGuire et al., 1988).
The constitution of a surplus of resources is therefore a prerequisite for any social commitment.

The results of research by McGuire et al. (1988) support this hypothesis. Indeed, the authors conclude that current economic/financial performance is a guarantee of future social performance. Ruf et al. (2001) showed that economic/financial performance is positively correlated with current or future variation in social performance. On the other hand, Balabanis et al. (1998) point out that social performance is certainly correlated with past, current and future economic/financial performance, but this correlation turns out to be weak, the authors conclude that the results are inconclusive.

At the level of our research work, we are interested in this relationship, which states that economic performance has a positive and significant impact on social performance.

Justification of the link between economic performance and environmental performance
The Natural Resource- Based Theory View (NRBV) (Hart, 1995, 1997; Hart and Ahuja, 1996; Hart and Christensen, 2002) has been widely used by authors who have studied the relationship between the environmental performance and the economic performance of organizations often in the objective of testing the win-win hypothesis of Porter (1995).

Work mobilizing the NRBV theory has sought to identify the dynamic organizational capacities that make it possible to derive a solid competitive advantage from a proactive environmental strategy. According to Hart (1995), the progressive scarcity of resources makes the environmental constraint more and present, and the organizations, which have integrated this problem, benefit from a sustainable competitive advantage. This advantage allows the organization to invest in new unexplored markets for environmentally friendly products/services and even to influence future regulations by positioning itself as an expert with governments (Porter and van der Linde, 1995).

However, the empirical debate on the question of the impact of PE on environmental performance remains mixed and does not allow us to conclude on the nature of the link that exists between the two dimensions. Some studies validate a positive link (Bragdon and Marlin, 1972; Russo and Fouts, 1997; Stanwick and Stanwick, 2000; Wahba, 2008), others highlight a negative relationship (Jaggi and Freedman, 1992; Cordeiro and Sarkis, 1997; Wagner et al., 2002; Lopez et al., 2007) and still others demonstrate a neutral link (Chen and Melcalf, 1980; Freedman and Jaggi, 1992; Christmann, 2000; al., 2006).

At the level of this research work, we joined the trend, which stipulates the presence of a positive impact between economic and environmental performance, and we assumed that economic performance positively and significantly influences environmental performance. In what follows, the details of the practices and indicators used to represent and measure the global performance of cooperatives (Table 3).
Table 2: Summary of practices/indicators and their justification

<table>
<thead>
<tr>
<th>Variables</th>
<th>Practices/indicators</th>
<th>Justifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Financial profitability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commercial profitability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average attendance rate of members at meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regularity of general meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access to information by members/adherents</td>
<td></td>
</tr>
<tr>
<td><strong>Territorial anchoring</strong></td>
<td>Contribution to the creation of local jobs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution to the use of local resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of local suppliers</td>
<td></td>
</tr>
<tr>
<td><strong>Social impact</strong></td>
<td>Contribution to improving the health of members and the local community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution contributes to the improvement of the education of the members and the local community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution to the improvement of the environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution to the improvement of employment</td>
<td></td>
</tr>
<tr>
<td><strong>Social innovation</strong></td>
<td>Respond to the new needs of members and the local community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respond to unmet needs of members and local community</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental performance</strong></td>
<td>Pollution reduction rate (water, air, soil, chemicals, etc.)</td>
<td>GRI Standards</td>
</tr>
<tr>
<td></td>
<td>Rate of reduction in the consumption of water, material, fossil energy, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of equipment or processes using or consuming less water, material.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rate of use of renewable energies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste reuse rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recycling practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of actions to raise awareness among members, employees and citizens regarding their role and their interest in preserving the environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degree of compliance with environmental laws and regulations</td>
<td></td>
</tr>
</tbody>
</table>
Thus, our three-dimensional model makes it possible to represent the performance of cooperatives, taking into consideration its specificity as a dual form, which reconciles a social purpose and economic activity. As such, we note the joint presence of the economic dimension, which refers to the market identity of the cooperative, and the social dimension, relating to the fundamental purpose of the organization. As for the presence of the environmental dimension, it is explained by the enthusiasm for the environmental issue, which has become a strategic issue for most organizations, which are increasingly committed to voluntary approaches to integrate ecological concerns in their daily practices.

Methodology and field of study

Research methodology

Our research is based on a literature review of the key concepts of our subject, namely: performance, the social and solidarity economy and the cooperative sector. From this examination, we have deduced a conceptual model represented by structural equations. Specification of a model including a measurement model (building measurement scales) and a structural model. Cause-effect relations between global performance and its dimensions, and interactions between different dimensions. We have thus mobilized two main theories that have allowed us to explain the construction of performance and the interactions between its dimensions. The objective is to represent the global performance of cooperatives and to confront our proposed model with the reality of cooperatives via an empirical study. With this in mind, we opted for a hypothetical-deductive approach through a quantitative study carried out in Morocco among the cooperatives of the region of Souss Massa, as being the second region considering the number of cooperatives, which operate there. The results are analyzed using the SmartPLS software to verify the hypotheses and the link between the variables.
Field of study

Cooperatives play an essential role in the economic development of the Souss Massa region, given its importance in economic and social development programs. This sector offers promising opportunities to create economic and social projects that contribute to the fight against poverty, exclusion and integration of small producers on the market.

With the launch of the National Initiative for Human Development (INDH), which has positioned cooperatives as the engine of socioeconomic development (AGR). There has been a significant change in the sector, which has led to an increase in the size and quality of cooperatives. According to statistics from the Co-operation Development Office for the year 2020, the region has over 3,900 cooperatives with over 56,700 members. The sectoral breakdown shows a predominance in the agricultural sector. Almost half of the cooperatives are agricultural. This predominance can be explained by the agricultural potential of the prefecture, be it in terms of Argan trees, aromatic and medicinal plants, cacti, breeding, etc.

This justifies our choice relating to the study of this sector at the level of the SM region with over 2300 agricultural cooperatives, which is equivalent to 60% of cooperatives in this region.

The sample from which this research is performed is chosen by the quota method, which is more commonly used in studies to generalize results. In our case, we selected the cooperatives according to their geographical position. Adopting this sampling method requires a sampling frame and this is the database of the Development and Cooperation Office (CDO). The sample size calculation method indicated that it is necessary to have at least 330 observations (Durand, C., 2007). We administered 350 questionnaires to the leaders of the cooperatives, of which 250 responded. Of his responses, 214 were actionable.

Table 3: Distribution of cooperatives according to their geographical position

<table>
<thead>
<tr>
<th>Province</th>
<th>Number</th>
<th>Members</th>
<th>%</th>
<th>Number selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agadir Ida Ou Tanane</td>
<td>834</td>
<td>10,044</td>
<td>21</td>
<td>75</td>
</tr>
<tr>
<td>Chtouka Ait Baha</td>
<td>684</td>
<td>10,299</td>
<td>17.5</td>
<td>61</td>
</tr>
<tr>
<td>Inzegane Ait Melloul</td>
<td>351</td>
<td>4,823</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Taroudante</td>
<td>739</td>
<td>18,225</td>
<td>19</td>
<td>66</td>
</tr>
<tr>
<td>Tata</td>
<td>676</td>
<td>6,849</td>
<td>17</td>
<td>60</td>
</tr>
<tr>
<td>Tiznit</td>
<td>645</td>
<td>6,541</td>
<td>16.5</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>3,929</td>
<td>56,781</td>
<td>100</td>
<td>350</td>
</tr>
</tbody>
</table>

Source: CDO

Results and discussion

To process the collected responses, analyse the results and test the hypotheses, we used the Smart PLS software, which allowed us to carry out two tests. The first focuses on the reliability of the measurement model, whilst the second tests the quality of the structural model.

Validity of the measurement model

The validity and reliability of variables is a critical aspect of evaluating any theory. They make it possible to have confidence in the way in which they account for the phenomenon studied. Items or
measurement indicators measure each variable. In order to ensure the validity of the measurement model, it is necessary to analyze the convergent validity of the measurement indicators and the discriminant validity.

- **Convergent validity**: this test goes through two sub-tests, the reliability of the items (Outer loading) to check the reliability of the items by examining the correlation of the items and their theoretical variables. A threshold of 0.7 was retained. In our study, all items that are above 0.7.

Table 4: Item loading values

<table>
<thead>
<tr>
<th></th>
<th>ECO</th>
<th>FD</th>
<th>AT</th>
<th>IS</th>
<th>INNO</th>
<th>SOC</th>
<th>ENV</th>
<th>GLOBAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>0.960</td>
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<td></td>
<td></td>
<td></td>
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<td>FD2</td>
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<td>IS1</td>
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<td>IS2</td>
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<td>IS3</td>
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<td>INNOV1</td>
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<td></td>
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<td></td>
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<tr>
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<td>0.905</td>
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<td>0.903</td>
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<td></td>
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<tr>
<td>ENVIR3</td>
<td></td>
<td>0.933</td>
<td>0.935</td>
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<tr>
<td>ENVIR4</td>
<td></td>
<td>0.827</td>
<td>0.851</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVIR5</td>
<td></td>
<td>0.939</td>
<td>0.894</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>ENVIR6</td>
<td></td>
<td>0.940</td>
<td>0.966</td>
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<tr>
<td>ENVIR7</td>
<td></td>
<td>0.980</td>
<td>0.909</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ENVIR8</td>
<td></td>
<td>0.742</td>
<td>0.929</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discriminatory Validity: tends to assess the degree to which one variable is different from others. To apply the discriminant validity Fornell and Larcker (1981) suggest the use of the AVE (Average Variance Extracted) which can be translated by the mean variance shared between the variable and its items. This measure must be higher than the variance shared between the variable and the other variables. The discriminatory validity of our model is therefore validated.

Thus, the structural equation of our model looks as follows:

\[ \text{GLOB} = 0.222 \text{ECO} + 0.417 \text{SOC} + 0.302 \text{ENVIR} \]

The quality of the structural model

As part of the PLS approach, the quality of the structural model needs to be assessed. A distinction must be made between the global quality of the model and the quality of measurement for each block of variables.

Table 5: Composite reliability of model constructs/variables

<table>
<thead>
<tr>
<th>Built</th>
<th>Cronbach's Alpha</th>
<th>Composite reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic performance</td>
<td>0.953</td>
<td>0.970</td>
<td>0.914</td>
</tr>
<tr>
<td>Democratic functioning</td>
<td>0.928</td>
<td>0.954</td>
<td>0.874</td>
</tr>
<tr>
<td>Territorial anchoring</td>
<td>0.925</td>
<td>0.952</td>
<td>0.870</td>
</tr>
<tr>
<td>Social impact</td>
<td>0.956</td>
<td>0.968</td>
<td>0.884</td>
</tr>
<tr>
<td>Social innovation</td>
<td>0.969</td>
<td>0.985</td>
<td>0.970</td>
</tr>
<tr>
<td>Social performance</td>
<td>0.955</td>
<td>0.968</td>
<td>0.882</td>
</tr>
<tr>
<td>Environmental performance</td>
<td>0.962</td>
<td>0.969</td>
<td>0.795</td>
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<tr>
<td>Global performance</td>
<td>0.912</td>
<td>0.898</td>
<td>0.782</td>
</tr>
</tbody>
</table>

Table 6: Relative correlations between model variables

<table>
<thead>
<tr>
<th>Built</th>
<th>AVE</th>
<th>ECO</th>
<th>DT</th>
<th>YOUR</th>
<th>IF</th>
<th>INNOV</th>
<th>SOC</th>
<th>ENV</th>
<th>GLOBAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic performance</td>
<td>0.914</td>
<td>0.958</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic functioning</td>
<td>0.874</td>
<td>0.899</td>
<td>0.935</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Territorial anchoring</td>
<td>0.870</td>
<td>0.903</td>
<td>0.894</td>
<td>0.933</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social impact</td>
<td>0.884</td>
<td>0.874</td>
<td>0.833</td>
<td>0.878</td>
<td>0.940</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social innovation</td>
<td>0.970</td>
<td>0.870</td>
<td>0.751</td>
<td>0.868</td>
<td>0.897</td>
<td>0.945</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social performance</td>
<td>0.882</td>
<td>0.832</td>
<td>0.898</td>
<td>0.875</td>
<td>0.905</td>
<td>0.912</td>
<td>0.939</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental performance</td>
<td>0.795</td>
<td>0.875</td>
<td>0.902</td>
<td>0.897</td>
<td>0.831</td>
<td>0.846</td>
<td>0.895</td>
<td>0.945</td>
<td></td>
</tr>
<tr>
<td>Global performance</td>
<td>0.782</td>
<td>0.905</td>
<td>0.915</td>
<td>0.910</td>
<td>0.898</td>
<td>0.918</td>
<td>0.902</td>
<td>0.898</td>
<td>0.948</td>
</tr>
</tbody>
</table>

Discriminatory Validity: tends to assess the degree to which one variable is different from others. To apply the discriminant validity Fornell and Larcker (1981) suggest the use of the AVE (Average Variance Extracted) which can be translated by the mean variance shared between the variable and its items. This measure must be higher than the variance shared between the variable and the other variables. The discriminatory validity of our model is therefore validated.

In general, the quality of the measurement model can be assessed by four tests: R2, f2, Q2 and GOF.

We proceed to test the quality of the structural model.

Coefficient of determination R2: it refers to the explanatory power of the structural model. It corresponds to the
average of the coefficients of determination observed on the dependent variables, in other words the average of the variance explained by the different variables.

Table 7: Coefficients of determination observed on the dependent variables

<table>
<thead>
<tr>
<th>Built</th>
<th>R2</th>
<th>Appreciation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic performance</td>
<td>0.808</td>
<td>high</td>
</tr>
<tr>
<td>Social performance</td>
<td>0.913</td>
<td>high</td>
</tr>
<tr>
<td>Environmental performance</td>
<td>0.916</td>
<td>high</td>
</tr>
<tr>
<td>Global performance</td>
<td>0.9</td>
<td>high</td>
</tr>
</tbody>
</table>

*R2>0.67 means high construct explanation (Chin, 1998)

The acceptable level of R2 is very high, which shows that the independent variables are explained by more than 80% by the explanatory variables.

- **Effect size coefficient f2**: this is to measure the size of the effect of the dependent variables on the independent variables. According to the scale of Cohen (1988), an effect greater than 0.35 is considered as large effect, between 0.15 and 0.35 is considered as medium effect, between 0.15 and 0.1 is considered as weak, then if it is less than 0.1 refers to the absence of effect of the explanatory variable on the explained variable.

The results of f2 confirm the results of testing the hypotheses:
- Economic performance has a neglected influence on social performance (f<0.1);
- Economic performance has a considerable effect on environmental performance (f2<0.3);
- Economic, environmental and social performance have a broad effect on global performance;

Table 8: size of the effects of the explanatory variables on the explained variables (f2)

<table>
<thead>
<tr>
<th>Variables explained</th>
<th>Social performance</th>
<th>Environmental performance</th>
<th>Global Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic functioning</td>
<td>0.643</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Territorial anchoring</td>
<td>0.963</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social impact</td>
<td>1.089</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social innovation</td>
<td>0.039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic performance</td>
<td>0.029</td>
<td>0.318</td>
<td>1,116</td>
</tr>
<tr>
<td>Environmental performance</td>
<td>2,565</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social performance</td>
<td>4,100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Q2 predictive validity test**: this coefficient measures the ability of the model to measure the endogenous variable. In other words, the ability of the independent variables to predict the dependent variables. SmartPls generate the predictive validity test through the Blindfolding approach. The Q2 coefficient must be greater than 1%. According to the results of the Blindfolding test measuring the Q2 coefficient, the Global Performance construct has high predictive validity (0.77).

- **Test of the goodness of fit of the model (GOF)**: The global evaluation of the predictively of the model is given by the index of (Goodness of Fit (GoF)) which is the geometric mean between the average communality (which measures the performance of the external model) and the average R2 (which measures the performance of the internal model). It evaluates the global performance of the model (Tenenhaus et al., 2005). The
absolute and relative values of the GoF are between 0 and 1. It allows measuring the performance of the model compared to its best possible performance taking into account the specification of the model. The GoF is a descriptive index; there is no empirical threshold to evaluate it. We can nevertheless consider that a GOF higher than 0.7 attests to a good quality of adjustment of the model. We assessed the goodness of fit for each construct, and then deduced the goodness of fit of the global model. The coefficient is determined according to the following equation (GOF) \(=\sqrt{R^2} - (AVE) = 0.814\), which reflects a high goodness of fit of our global model.

In summary, the conditions of validity and reliability of the research model, variables and their items and measurement scales are verified. The measurement scales are reliable and consistent. The convergent and discriminant validity and the global validity of the structural model are checked.

Causal analysis and testing of hypotheses

Causal analysis is based on the structural equation model. The analysis was conducted using SMARTPLS software. The PLS approach makes it possible to study several relationships between variables simultaneously. The body of assumptions provides a structural model built around hypothetical causal relationships between variables. Causal analysis employs the method of calculating path coefficients (regression coefficients) between variables and calculating the P-value (P-Value) which measures the probability of error that may exist in this relationship. This value must be less than 5%;

On a practical level, and through the application of the Smart PLS software, the analysis of the results of the various tests, we have made it possible to identify relevant results on the relationships between the variables of the model. As such, Falk and Miller (1992) suggest that a “good model” obtained by PLS regression must have determination coefficients greater than 0.1. As for Chin (1998), he considers that in order to be considered significant, the standardized structural coefficients should be at least equal to 0.2, he also suggests, in the case of bootstrapping, the P-Value coefficient must be lower at 5% and the coefficient of T-Value or Student’s T, must be greater than 1.96 at the 5% threshold. It is this last choice that was retained from the bootstrap method, commonly used in the context of research in management sciences.

Table 9: results of the tests of the hypotheses before and after adjustment of the model

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationships</th>
<th>T-Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>ECO-&gt;GLOB</td>
<td>13.990</td>
<td>Detention</td>
</tr>
<tr>
<td>H1b</td>
<td>SOC-&gt;GLOB</td>
<td>47.071</td>
<td>Detention</td>
</tr>
<tr>
<td>H1c</td>
<td>ENVIR-&gt;GLOB</td>
<td>17.345</td>
<td>Detention</td>
</tr>
<tr>
<td>H2</td>
<td>ECO-&gt;SOC</td>
<td>0.051</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3</td>
<td>ECO-&gt;ENVIR</td>
<td>9.302</td>
<td>Detention</td>
</tr>
</tbody>
</table>

Based on the results of the test of the P-Value coefficient and the T-Value coefficient, all the hypotheses are retained except for one, having a P value lower than the threshold retained.
Discussion of results

In what follows, we analyze the axes of our model and the results of the test of the structural model.

Economic performance axis

Because of the co-operative's dual nature, the economic dimension of performance plays an important role in overall performance. Cooperatives are in constant competition with private enterprises and are often compared to their economic and financial situation. In this context, cooperatives must demonstrate an economic and financial performance that enables them to position themselves relative to the private sector. With this in mind, we have opted for economic/financial indicators widely used to evaluate the economic performance of private enterprises, namely: economic profitability, financial profitability and commercial profitability.

In terms of testing our structure model, calculating the magnitude of the effect of PE on the GP was considered high. Always supporting our proposal and supporting our assumption that the PE has a positive and meaningful impact on the GP. The EP reaching 22.22% can explain the global performance.

Concerning the PE and SP relationship, the question of the effect of economic performance on social performance remains today one of the most treated themes in the management science literature. The many studies on the links between PE and MS do not lead, for the moment, to any consensus. However, the existence of a positive relationship between PE and MS is based on the resource theory, which supports a positive causality of the relationship, i.e. a positive impact of PE on MS. At the test level of our structural model, the calculation of the size of the effect of PE on PS was considered weak, leading to refute our proposition and reject our hypothesis stipulating the positive and significant influence of PE on SP.

As for as EP and ENVIR relations are concerned, calculating the significance of the effect of the IP on environmental performance was deemed high, allowing us to support our proposal in addition, support our hypothesis stipulating the positive and significant influence of EP on environmental performance. In fact, cooperatives with a high EP are those that integrate processes that protect the environment, use renewable energies also launch actions and projects aimed at preserving biodiversity.

Social performance axis

Since cooperatives belong to the SSE sector, they are required to respect the values and principles of cooperation in their search for economic performance. These organizations are led to seek, in addition to economic performance, social performance, materializing through their associative practices (Côté, 2007). Indeed, the social dimension constitutes a fundamental pillar of the performance of cooperatives. This dimension refers to the organization's ability to manage and meet the expectations of its stakeholders. Therefore, its evaluation relates to the level of satisfaction of the PPs with regard to the actions and efforts
maintained by the organization on the indicators of this performance and which we have summarized in four main indicators: democratic functioning, territorial anchoring, social impact and social innovation.

In the light of the results of our quantitative study, the cooperatives studied display an average social performance of more than 3.5/5, reflecting a satisfactory level of satisfaction of the PPs vis-à-vis the activities and efforts of the organization.

Regarding the influence of social performance on global performance, and in accordance with the results of the correlation test, T-value, and f², we found a positive and significant influence allowing us to retain our hypothesis H1.b.

Environmental performance axis

The protection of the environment has become a major issue of the 21st century at the same time as the idea of its degradation, both global and local, caused by human activities, has become essential. Several events have been organized and several agreements and conventions have been put in place by global organizations with a commitment to States around the world.

In this context, ecological concerns have gradually become a real strategic issue for most companies, which are increasingly committed to voluntary approaches to integrate ecological concerns into their daily practices. Thus, since the 2000s, the main challenge for companies no longer concerns the recognition of environmental issues, nor their formal commitment to environmental protection, but rather the improvement of their environmental performance (Gendron, 2004). The SSEOs, in this case the cooperatives, are no exception to this logic given their social purpose and their economic activity, which results in the exploitation of natural resources. According to the correlation test (Path coefficient), the T-value and the f² test (size of the effect), environmental performance positively influences the performance of cooperatives, which leads us to retain hypothesis H1.c.

Research Implications

Theoretical implications

In summary, and theoretically, the results of our study confirm the multidimensional nature of performance through an initial model tested on SSEOs, which makes it possible for this research work to enrich the work on global performance. By mobilizing both theoretical frameworks (the theory of stakeholders and theory of resources) for their instrumental complementarity, a global performance integrator model can be obtained, considering the interplay between the three dimensions identified in the literature review. More precisely, we confirm the main predictions of ST and resource dependence theory regarding the positive links between the three components of overall performance, and the value of the notion of global performance itself as it is integrated. The reflection work (Pesqueux 2004; Capron and Quairel 2006) is then specified by a formalised approach that shows the results often anticipated by the first research (the assumptions of Capron and Quairel 2006), and describes some research on the impact of environmental performance, while...
revealing the weight of social performance in global performance.

The results indicate that some predictions for STs must also be nuanced. Looking at the parameters of the structural equation model shows that the social dimension has a greater impact on global performance than the other two economic and environmental dimensions. While they are linked, it would appear that we could consider a hierarchy of the effects of the three dimensions of global performance in our sample.

Managerial implications

From a practical perspective, co-operative leaders must be aware of the importance of performance issues in legitimizing their actions and improving their reputation. This performance results from integrating the economic, social and environmental dimensions. With this in mind, the cooperative's success depends on joint and concerted action on the three dimensions of performance:

- In the economic context, co-operatives are required to develop an appropriate business model to align their values and their objectives, the basis for the management model, and performance indicators. According to Côté (2018), this business model, known as the co-operative business model, faces the challenge of differentiating the co-operative, reflect values and goals at the heart of their purpose, while demonstrating their ability to compete and maintain a sustainable strategic position, and enable the achievement of its goals and results. From this point of view, and based on the results of the study, a minority of cooperatives were able to position themselves in relation to the competition by the adoption of highly advanced production and marketing practices, including strategic, technical, marketing, technological, human resources, partnerships, innovation, etc. These cooperatives have been able to rise to the challenge of economic performance in the face of increased capitalist competition and thus achieve global performance.

- As far as the social dimension is concerned, cooperatives are enterprises whose primary aim is to fulfill a social mission. In effect, and in view of organizational duality, cooperatives must ensure, at all times, their alignment with associative practices and respect for the principles and values of cooperation. The lack of this alignment threatens the loss of the co-op's own substance and significance, and become more like a capitalist enterprise. Related to these practices, we referred to the criteria of social utility and identified four types: democratic functioning, territorial anchorage, social impact, and social innovation. The results of the study show that these practices have a significant impact on social performance and, consequently, on the cooperative's global performance. In this regard, cooperatives are obliged to respond to the expectations of their stakeholders, mainly: members, the local community, institutional actors, etc.

- As we have proven, environmental performance is an essential part of global performance. This dimension is a prerequisite for achieving cooperatives' global performance. In fact, in a context of scarcity of natural resources, particularly in the case of the organizations studied, which
are mainly, agricultural cooperatives operating Argan, they have an obligation to preserve and prevent the deterioration of this wealth. Since then, Argan has become an intangible cultural heritage of humanity and an ancestral source of sustainable development. In this context, cooperatives are required to implement environmentally friendly practices enabling the preservation and exploitation of natural resources.

Contributions and perspectives

This research contributes to improving the understanding of global performance in general and its representation in the context of SSEO in particular. Three contributions can be identified. The first concerns the research sector. Our work is part of a new area of research and relates to a topical topic of global performance. He helps to explain this concept in the context of Moroccan cooperatives while trying to complement earlier theoretical and empirical work related to this topic. The second contribution consists of a combination of resource management theory and various improvements in stakeholder theory. The diversity of performance indicators used reflects the multidimensional nature of SSEO performance. Finally, the third theoretical contribution of this work concerns the choice to contextualize the research and the proposal of an analytical framework in this sense. In fact, it is only recently that research has begun to deal with the contextualisation of performance. The combined theoretical framework we have mobilised allows us to provide a thorough and multidimensional explanation of the factors determining the global performance of cooperatives.

The issue has been widely discussed in the field of economics and management. However, many questions remain unanswered and several blind spots recur frequently in empirical investigations. Indeed, the literature on the global performance of SSEO remains embryonic and lacks consensus on the nature of its representation and its evaluation indicators. The work provided has some methodological and conceptual deficiencies that compromise its scope and validity.

There are two reasons for the interest of this research: theoretical and practical. At the theoretical level, the objective of this research is to propose a model for representing and assessing the performance of cooperatives. From a practical point of view, SSEO managers need to be aware of the importance of performance problems that enable them to legitimise their actions and improve their reputation. This performance results from integrating the economic, social and environmental dimensions. In this perspective, the success of cooperatives depends on joint and coordinated action on the three dimensions of performance.

In summary, our study highlighted the representation of cooperatives' global performance that simultaneously considers economic, social and environmental dimensions. This implies, for the managers of these organizations, to consider and assess all of their business, social and environmental practices and to study the impact of these practices on their performance. With the variables presented and the indicators suggested in the model, it is possible to identify the main indicators to design a judgment. The variables used in the model may be the key elements for the
success of a performance described as global and be collected as part of an evaluation. Furthermore, our structural model can be used to develop, for example, good practices within cooperatives.

Social and solidarity economy organizations (SSEO), economic actors with multiple facets, suffer from a lack of visibility and legibility, sources of suspicion. As far as these structures and their relevant stakeholders are concerned, there is now a strong demand for theoretical and empirical reading material, but also for interpretative grids and analytical models, which highlight the performance of the SSEO. In this configuration, performance representation and evaluation appear to be a requirement for establishing its legitimacy vis-à-vis its partners and public opinion.

**Conclusion**

In an increasingly turbulent and globalized environment, increased competition, market saturation, increased sustainability requirements, etc. We are witnessing the emergence of the concept of global performance as the ambition of any organization in search of sustainability and sustainable growth. Theoretically, the concept of overall performance allows for several definitions, the summary of which refers to the aggregation of economic, social and environmental performance. We need to measure that performance in order to understand it. In this regard, several initiatives have been undertaken to propose tools and methods for assessing global performance.

As with any organization, cooperatives seek the global performance that enables them to ensure their sustainability by reinforcing their legitimacy as an organization of the social and solidarity economy, and through business practices, such as an organization operating in a capital-intensive market. In this context and in light of the literature review, we proposed a conceptual model to represent the cooperative's global performance. This model considers the three dimensions of global performance and the links of causality and interaction between them. The model also takes into account the direct impact that cooperative practices have on the economic, social and environmental dimensions, and thus the indirect effect of these practices on the global performance of cooperatives.
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