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# Cooperatives and Sustainable Development: A Multilevel Approach Based on Intangible Assets

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Abstract: There is a major interest in analyzing the role of intangible assets on sustainable development, which is a topic under the auspices of the so-called 5th stage of research. Cooperatives are enterprises directly committed to sustainable development due to their dual nature—economic and social. This paper is based on a literature review and proposes a theoretical model based on intangible assets for understanding the role of cooperatives as drivers of sustainable development. The findings show that these assets are involved in regional competitiveness and especially evident when considering cooperatives. It can be concluded that, when focusing the attention on cooperatives, it is useful to use a multilevel approach (micro and macro levels) to understand the whole process of interaction between intangible assets and sustainable development. The model aims to contribute to a line of research of great potential, but is also a practical tool for reflecting on cooperativism and for government agencies.

**Keywords:** intangible assets; corporate social responsibility (CSR); territories; cooperatives; sustainable development

### 1. Introduction

For a relatively short time now, there has been a growing interest in analyzing the role of intangible assets (IA) on regional growth. Research on IA has evolved from a micro level to its integration into a macro level through different stages [1]. IA have been considered sources of competitiveness for some time—as highlighted by the seminar paper by Barney [2]—and, by extension, indirectly responsible for the development of the territories where they are integrated [3–6]. However, the relationship between IA and economic development has recently become more complex, demanding an analysis of the role of these assets within sustainable development (SD). This relationship is one of the main interests of the 5th stage in IA research [7].

Hence the need to review the role of IA in relation to a much broader economic objective and in line with the demands of the United Nations (UN) with respect to its Sustainable Development Goals (SDGs) and its 2030 Agenda [8]. This relationship incorporates the so-called social IA, or Sustainable Intellectual Capital, as a novel line of study between both concepts that works directly to promote SD [9–13].

The role of Corporate Social Responsibility (CSR) in achieving SD is a critical issue in aligning businesses to this end [14,15]. SD implies that companies, among other entities, are socially responsible. This link has even been studied in controversial sectors such as construction [16] or mining [17]. Only through the exercise of CSR will it be possible to create a better performance for these sectors and their territory. It is for this reason that CSR is an input in SD, which will lead to economic growth as

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the ultimate and necessary goal for social and territorial progress. In view of this, we do not lose sight of the fact that the effects of CSR indirectly affect the territories, being the second variable that justifies the theoretical model we propose.

In this context, the social economy can make a decisive contribution to the change in the production model and to the recovery of the economy through the consolidation of a sustainable economy based on the principles of CSR. To a certain extent, the social economy is a precursor of, and committed to, SD. Within this type of economy, we find different types of organizations that are innately concerned about CSR [18]. We will focus on the most well-known type of society, the cooperative, in order to establish the axes of its development in the territory. Cooperativism is a mode of production contributing to solve the problems of capitalism with social and environmental issues [19], because "being socially responsible is not just a nice label for co-operative businesses, it is fundamental to the co-operative culture" [20] (p. 1).

Prior studies have focused on the analysis of the value of cooperativism in territories [18,21]. It is considered that cooperatives are essential for the development and growth of the territories, since they have an impact on the creation of jobs in contexts that are not precisely favored, on addressing new social needs that respond to groups under risk of social exclusion and, in short, on the promotion of social capital [22]. In the same sense, the institutions and associations most linked to cooperatives, such as the International Cooperative Alliance (ICA) and Cooperatives Europe (Coops-Europe), always include references to this aspect among their reports. Following the last report on the European Union's (EU) strategy for international development for 2014-2020, the Agenda for Change, cooperatives are highlighted as critical local private sector actors under the following ideas: "co-operative enterprises are a perfect fit with the EU2020 strategy that aims for a sustainable economy, putting people and responsibility first with a sustained fight against exclusion and a transition to a green economy" [23]. However, Zeuli and Radel [24] addressed a serious omission of the cooperative model in the community development literature, an issue that remains a major research gap.

This paper aims to continue arguing for the importance of the cooperative model for regional development from the point of view of sustainability. Cooperatives constitute an ideal context for applying a model of territorial development based on the exercise of CSR and IA. A literature review has been carried out as our methodology. This is a theoretical contribution based on selected articles from internationally recognized peer-reviewed academic journals covering different disciplines based on IA-CSR-SD. They have allowed us to create the model we propose. Nevertheless, this is an exploratory study to justify the conceptual model, which should subsequently be empirically validated as a necessary future line of action.

The paper is structured as follows. After this first introductory section, we will present the value of each of the proposed variables: IA, CSR and cooperatives. With these bases, the third section will allow us to present the proposed model as well as its justification. We will end with a section discussing the advances of this model as well as its limitations and future lines of research.

# 2. Methodology

This study is based on a systematic literature review of three units of analysis which are the main axes of the model proposed: IA, cooperatives and SD. Our idea was not only to present the main units of analysis but also to incorporate the currently available and scarce knowledge from studies devoted to linking them. In this sense, the most relevant databases used for academic research—Journal Citation Reports, Scopus and Google Academic—were analyzed using the following keywords (alone or in all possible combinations): intangible assets, intellectual capital, cooperatives, sustainability, sustainable development, corporate social responsibility and regional competitiveness.

This process led us to obtain 72 related papers and reports that were considered as relevant after being evaluated by the research team. These studies have allowed us to identify themes, debates and gaps that are synthesized in the institutional framework (Section 3.1), IA evolution (Section 3.2), IA for SD (Section 3.3) and cooperatives within SD (Section 3.4).

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Likewise, as the focus of a literature review is to summarize and synthesize the arguments and ideas of others, all of these studies were crucial to develop the model we propose, adding new knowledge to the state of the art in this specific and understudied field of research.

# 3. Theoretical Foundations: Sustainable Development as a Goal for Territories

# 3.1. The Institutional Framework

The Brundtland Report [25] defined SD as development that can meet the needs of today's world without compromising the ability of future generations to meet their own needs. Since then, there have been successive and continuous pronouncements about it. Among them, the most global initiative is the SDG list established by the UN within its 2030 Agenda. In total, 17 necessary objectives would articulate the need to harmonize economic growth, social inclusion and environmental protection. These elements are interconnected and are all crucial for the well-being of individuals and societies. The World Economic Forum [26] refers to sustainable competitiveness as the set of institutions, policies and factors that make a nation productive over the longer term while ensuring social and environmental sustainability. Regardless of how one refers to SD, "today it has become inseparable from the sustainable development paradigm" [12] (p. 4851). It is necessary to combine the study of the factors that influence regional competitiveness and the latter's sustainable aspect. With this objective in mind, countless agencies, institutions and countries have put SD on their respective agendas.

The UN has also emphasized that cooperatives are sources of SD from the very beginning. In a more concrete way, the General Assembly Resolution 70/128 concludes that "cooperative enterprises have a strong potential to alleviate poverty and hunger, stimulate economic growth, create employment and decent work opportunities, build social capital, address inequality and empower women. Such power of cooperatives is particularly important for the achievement of the Sustainable Development Goals in the least developed countries". In addition, the International Labor Organization [27] considers that cooperatives meet sustainability per se, due their own principles and values, and are well placed to contribute to the triple bottom line of economic, social and environmental objectives. Later, the International Cooperative Alliance (ICA) [28] (p. 1) insisted in the idea that "the co-operative model of business is based on ethics, values and principles that put the needs and aspirations of their members above the simple goal of maximizing profit. Through self-help and empowerment, reinvesting in their communities and their concern for the well-being of people and the world in which we live, co-operatives nurture a long-term vision for sustainable economic growth, social development and environmental responsibility".

From all the above, it can be deduced that the relationship between cooperativism and SD is apparently easy to justify, but we will look deeper into how it can be instrumentalized under the 5th stage of IA research.

# 3.2. Understanding the 5th Stage of Intangible Assets Research

The last 40 years have seen substantial advances in terms of IA research. It is undeniable that from the 1980s until today this topic has become part of the business, strategic, accounting and reporting field. Some authors agreed to assign them to different stages due to their commitment to a specific research interest [29]. In our research we consider these stages as the basis for the future research agenda due to the evolutionary development of IA. Accordingly, we will summarize and comment on five different stages.

The 1st stage includes pioneering papers highlighting the relevance of IA for companies. As a seminar paper, Edvinson and Malone [30] and their hidden roots of value showed, through this metaphor, the relevance of these assets. The market value-book value was another milestone to justify IA relevance [31].

In a 2nd stage, the main concern for IA researchers was to define theories and frameworks— Intellectual Capital (IC) Models—for their measurement. Sometimes, the terms IA and IC are used Sustainability **2020**, *12*, 4099 4 of 14

interchangeably, with the latter including all the IA present in an organization. Resource-based Perspective, Knowledge Management and Learning Perspective were some relevant theories used at this time [32]. Dumay and Garanina [33] and Dumay et al. [29] justify the 2nd stage with the reasoning that people even wanted to ascribe monetary value to IC. However, it was a difficult task, given their non-physical nature. Dumay and Guthrie [7] also pointed out that the early stages have figured out the orientation of an interdisciplinary research in this arena, which allowed for a more global approach. As a turning point, the classical tripartite division was then created to identify blocks in order to operationalize IA's identification and control: structural capital, relational capital and human capital. In addition, well-known examples of these models reached their most popular moment: Skandia Navigator [30] or the Intangible Assets Monitor [34], among others.

Later, in the 3rd stage, empirical research related to all the theoretical developments was carried out within companies to test their relevance and to find out how IA were managed. This stage examined how IC was used in practice [35] and how it was used and managed within the organizations [36]. Dumay and Garanina [33] (p. 20) argue that the 3rd stage "has the potential to be transformational because, rather than developing IC practices, it gets involved with the praxis of IC (actually implementing IC) inside organisations" [33] (p. 20). This stage focused on identifying and measuring IA with the purpose of increasing the impact of IC.

Dumay and Garanina [33] described the 4th stage, based on an ecosystem approach to IA. At this stage, researchers should cover not only businesses but also countries, smaller territories such as regions [37] or even cities [38]. A macroeconomic interpretation of IA was the key point in this stage. That is, the central approach was the role of IA for the economic and social development of territories, extensive to any type of macroeconomic figure. This is a valid orientation to our paper due to the role of IA as a linkage between the micro and macro levels.

The world's real problems are the main focus of the 5th stage of IA research. Sustainability, as the avoidance of the depletion of natural resources in order to maintain an ecological balance, is a real challenge at the moment. Going ahead, sustainability defined as the meeting of needs in the present without compromising the ability of future generations to meet their own needs [39], is the main problem of our time. The concept of sustainability, intrinsically linked to the three pillars—economic, environmental and social—seeks to preserve profits, but also the planet and the people. Nowadays, IA researchers should worry about the need to link people as the remaining collective not yet considered. For this reason, Dumay and Guthrie [7] argued at this level for the need for multidisciplinary research, which implies "researchers going out in the world and interacting with people and organizations as part of the solution" [7] (p. 2299). Sustainability plays a major role in the present world's worries and, for this reason, it must be a key aspect of IA research. See Table 1 for the main advances and implications for cooperatives.

IC Stage Main Concern for IC Researchers Implications for Cooperatives The analysis of the relevance of IA as a Cooperatives have IA as the remaining type of organizations. 1st source of competitive advantages However, private companies captured the attention of researchers. The development of theories and Given the particular dual nature of cooperatives, it will be neccesary 2nd to create a specific model for them. frameworks to assess IA The analysis of IA from a practical Large listed companies are recurrent in empirical papers. 3rd point of view in the reality of business Cooperatives are rarely analyzed in IA research. As cooperatives are directly related with local communities, they The extension of IA to territories. 4th countries or other territorial frames. constitute a clear research gap in this topic. IA as solvers of real problems, Cooperatives are considered solvers of sustainability problems due 5th sustainability as one of the most to their dual nature, and for this reason a significant topic to be immediate concerns for society. addressed.

**Table 1.** Cooperatives and IC development.

Source. Own

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# 3.3. Intangible Assets and Sustainable Development

Over the past decades, IA assets have proliferated as a field of research. Their contribution to the creation of competitive advantages has been emphasized [2,40,41]. IA include all the resources that, although lacking physical substance, contribute future benefits to the organization to which they belong. These include know-how, quality management, innovation, consumer trust and reputation, among other assets. This definition is congruent with those of Lev [31] and Li et al. [42].

To the best of our knowledge, IA clearly impacts regional development. Thum-Thysen et al. [43] mention two ways in which intangible investments may influence the economy: as production factors and/or as drivers of innovation. Thus, "the spending on IA has a direct effect on output (Gross Value Added, GVA) level and an indirect growth effect though capital accumulation" [44] (p. 14).

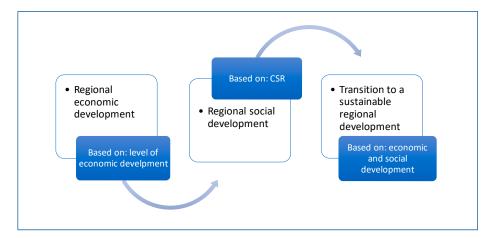
The management of IA should determine the convergence at the micro and macro levels [1]. In this sense, there already exist models to measure national IC [45] and even models for cities [38] within the 4th stage of IA research. As Marcin [46] concludes, it is necessary to present IC in the regional perspective, a question not raised until today, "because there is no universal and generally accepted definition of regional intellectual capital, the more difficult it is to look at the concept from such a perspective and to find out the right characteristics of the term" [46] (p. 291).

The EU has been an arena of exemplary concerns about the role of IA in economic growth. A pioneering study on the topic is the report Intangible Assets and Regional Economic Growth (IAREG) [47], which theoretically reviews the role of knowledge capital, human capital, social capital and entrepreneurship capital on the growth of the EU regions. This report commented on the lack of empirical studies and called for further research. In addition, the report Investment in the EU Member States [48] demanded more empirical evidence to assess the linkages between the total spending on IA and the remains not counted as investment in official statistics. Another report, Unlocking Investment in Intangible Assets [49], studies investments in IA and their impact on productivity and gross value added, concluding that the participation of IA in explaining productivity differentials between member countries is one to three times higher than that of tangible assets. Recently, the OECD [50] has also studied sectors that are intensive in IA on productivity growth. External finances are not the only financial frictions for companies; IA intensity should also be introduced in this relationship. Moreover, and, even more importantly, IA was analyzed "to address the paramount ecological, social, and demographic problems that our societies are facing" [38] (p. 861). Massaro et al. [51] have carried out a practitioners' view of IC and sustainability. They provide evidence about their interconnection and conclude that practitioners "are aware of the need to move from an economic dimension to a broader dimension that includes society and the environment" [51] (p. 382), that is, the 5th stage of IA research. There are still few contributions within this stage.

According to Makarov [52], IA and its development promote the regional transition to a sustainable progress. In his opinion, SD implies a change between post-industrial society and a society where knowledge is the main source of economic competitiveness. In Figure 1, we can observe these relationships.

Another study, carried out by Marcin [45], identified IC as the key factor for the success of nations and for determining their socio-economic development, due to their collective effect on the generation of sustainable wealth for their citizens. In this respect, Bontis [45] considered IC as the root of the future of territories. Surinach and Moreno [50], commenting on the main findings of the IAREG project, insist on the value of human and social capital precisely as cornerstones of territorial development. In light of all of these arguments, territories can be considered as indirect targets of the competitive advantages created through the management of IA by firms. If these assets play a key role in competitiveness, the economic development derived from IA is justified. However, our interest is still broader. We are including SD to have the whole picture, which leads us to wonder: how do IA fit in with the new framework? There are also studies that have contemplated this idea and which we will now consider.

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**Figure 1.** Movement toward sustainable development (SD). Source: Own elaboration based on Makarov [52].

Demartini and Del Baldo's [53] framework allows for the identification of the different blocks of IA as SD drivers. They suggest that social capital understood as all the IA oriented toward CSR is the most relevant IA block to improve the SD of a territory. But they add to this model the role of structural capital, relational capital and human capital, to offer a combined micro- and macro-level understanding of SD. This vision is congruent with our multilevel approach, as we later point out.

The relevance of CSR also leads López-Gamero et al. [9] to consider that it is necessary to create a new concept, sustainable IC, that emerges as the result of combining the classical three blocks, but from a CSR perspective: human sustainable IC, structural sustainable IC and relational sustainable IC. Januškaitė and Užienė [12] justify sustainable competitiveness based on the analysis of IA through the following dimensions: environmental sustainability, social sustainability, government, infrastructure efficiency and investments and technology. According to Chang and Cheng [54], environmental consciousness leads to a green IC as "the total stock of all kinds of intangible assets, knowledge, capabilities, and relationships, etc. about environmental protection or green innovation of both the individual and organization levels within a company" [54] (p. 77).

In sum, this indicates once again an indirect relationship between IA and territories. Nevertheless, this link highlights the participation of the IA deriving from responsible behavior—or, in other words, from the exercise of the CSR, if the goal is SD. IA are fundamental for economic development, but it is the so-called social IA or Sustainable IC that allow us to meet SD, the core of our concerns.

# 3.4. Cooperatives and Sustainable Development

Cooperativism is widely considered as an important element of a community's economic development strategy [18,21,24,55,56]. In particular, Zeuli and Radel [24] argue that in the three major existing paradigms for regional development—self-help, asset-based and self-development theories—the cooperative model always fits in, while warning of the advantages and disadvantages derived from this business formula.

Their differences from other types of companies justify their value for regional development. Thus, Zeuli et al. [55] indicate that, being controlled by people living in a community, they are more likely to be concerned with promoting growth than enterprises controlled by outsiders. The EU [56] goes further, stating that, as regards SD, "cooperatives are often important employers and contributors to the regional economy. They contribute to public policy objectives such as the development of human capital, the improvement of the competitiveness, and environmental sustainability" [56] (p. 6). According to Gertler [18] they are "practical vehicles for co-operation and collective action, both of which are crucial to sustainable development; they build and reinforce community" [18] (p. 6). In this line, Gordon-Nembhard [21] concludes that their local character leads cooperatives to increase community economic development and sustainability, and re-circulate resources. For this author,

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cooperatives allow for the creation of a solidarity economy that provides communities with diverse types of social and human capital. Bontis et al. [57] corroborate the key role of human capital for social and financial cooperative performance in the Italian case.

The value of cooperativism in the social capital creation process is especially commented on because of the stronger relations between members of a cooperative and their linkages with the community. Social capital does not come only from the characteristics of cooperatives but also from their outside relations. They are strongly rooted in their environment. Bauer et al. [58] point out their capacity to generate stable and lasting relationships with their customers and suppliers. For Bretos et al. [22], these companies are able to generate solid relationships at a local level, which are the result of trust and cooperation. Gertler [18] highlights their role as "key partners, trusted and respected by non-governmental organizations (NGOs), state agencies and private-sector firms. As brokering partners, they frequently provide leadership resources and may serve as facilitators for projects involving complex alliances" [18] (p. 11).

Human capital is also especially relevant for cooperatives. Following Borzaga and Galera [59] "conventional firms tend to adjust employment levels, while worker co-operatives adjust pay, thus safeguarding employment" [59] (p. 9). According to the last World Cooperative Monitor Report [60], cooperatives contribute to the sustainable economic growth and to stable, quality employment, employing 280 million people across the globe. That is, around 10% of the world's employed population, and this justifies their value for economic growth. For Simmons [61], member engagement is more evident in these companies, "where members are able both to have a say and make a difference", leading to a meaningful sense of commitment and loyalty" [61] (p. 243). Côté [62] finds that loyalty is a source of competitive advantage that is easier to achieve in cooperatives than in other types of businesses, based on their specific values and principles, such as democratic management, member education, ethics based on honesty or cooperative values and people-based CSR.

Both social and human capitals are directly related to the relationship between CSR and cooperatives. The latter can be easily justified thought the cooperative's nature. According to the EU [48] (p. 12), "as the principles of the social economy, inspired by the cooperative principles, are none other than the application of CSR in all its aspects, it can be stated that the social economy has been a pioneer in applying CSR, since it is an integral part of the values and operating rules of the social economy". Specifically, the antecedents of CSR in the cooperative context go back to the nineteenth century and to the Rochdale Equitable Pioneers Society [63]. Their specific principles and values consolidate a strong organizational culture that naturally fosters CSR [64]. Following the International Cooperative Alliance [65], it can be stated that "co-operatives have always endeavored to enable people to have access to goods and services without exploitation—to realize their needs and aspirations. This has led co-operatives to pursue a convergence between economic, social, and environmental interests—building triple bottom line sustainability" [65] (p. 1).

It is even possible to determine the influence of cooperativism on the SDGs. As the United Nations have stated, the interlinkages and integrated nature of the SDGs are of crucial importance in ensuring that the purpose of the 2030 Agenda is realized. If we do so, the lives of all will be profoundly improved and our world will be transformed for the better. The role of cooperatives within the Social Economy in the 2030 Agenda has already been reinforced by the creation of the Task Force on Social and Solidarity Economy. Recently, Mozas [66] has identified the SDGs most related to the agrifood cooperatives as one recent line of research in this field, to apply the SDGs to specific sectors/industries/companies.

# 4. A Multilevel Model for Understanding the Role of Cooperatives in Sustainable Development

Our conceptual model integrates both levels, microeconomic and macroeconomic, to provide a vision of how cooperatives contribute to SD. This is a key point that enables us to design a global frame to deal with IA and CSR (variables at the microeconomic level) and SD (the variable at the macroeconomic level).

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Following Coops-Europe, cooperatives sustain the local economy, provide social utility and encourage sustainability. This is according to the opinion of this organism, for which cooperativism is more than a nice label. On the contrary, it is the expression of why these enterprises identify themselves with Cooperative Social Responsibility. For this reason, the achievement of certain social IA requires less effort than in other types of business, since we start from an innate CSR through the principles and values that are specific to them. Consequently, it can be deduced that the human and social capital derived from cooperatives would be a key social IA for these companies. Nevertheless, Simmonds [61] states that cooperatives face the same issues as those confronting all business organizations, "including the search for meaning and legitimacy, how to mobilize value-based action, and how to inspire loyalty" [61] (p. 240). In a more concrete way, Castilla et al. [11] insist on the idea that cooperatives have to trade successfully, looking for the maximization of cooperative members' incomes. In this study, without losing sight of their individual performance, we are concerned with their collective performance. In other words, the cooperative outcome is twofold: to increase economic performance (i.e., financial outputs) and to promote mission-based performance [57].

In this sense, their special characteristics allow for social IA (in a microeconomic level), but also enable them to work more easily in SD. This latter goal requires not only the creation of wealth by the cooperative, but also that their environmental and social responsibility, which we refer to as SD, not endanger the current heritage for future generations, as stated in the Brundtland Report [25].

Furthermore, IA are sources of competitiveness for companies, as many authors have argued in the 1st stage of IA development research. However, only those derived from CSR or social IA would also allow the development of territories from a sustainable point of view, which is a main concern of the 5th stage of IA research. There are previous contributions, such as the one made by Castilla-Polo and Ruiz-Rodríguez [11] about IA, that can be derived from CSR. Following their conclusions, within the human block, CSR favors the participation of employees and their satisfaction, and improves their training, competences and skills; in the structural block, CSR usually improves internal communication, reinforces corporate culture and identity, promotes innovation; finally, in the relational block, it is important to highlight that when a company is responsible, better relationships with the main stakeholders are achieved, as well as stable and loyal links with customers and suppliers, contributes to the development of the communities and to the common good, etc. That is, CSR creates different social IA in any type of company, but especially in cooperatives due to their own principles and values, as we have pointed out. According to Bontis et al. [57], the main aim in cooperatives is "to create social value, boost cultural wealth, promote socio-economic development and stimulate social change. So, intangible assets are crucial" [57] (p. 716).

Considering the arguments exposed, and extending the traditional vision to include CSR as a hole into intangible management, the following relations could be considered. All of them have been raised from the point of view of a specific unit, that is, a micro-level approach focusing the attention on cooperatives. We can affirm that cooperatives and their innate CSR maintain a close relationship with SD through the creation of solid and stable linkages with their members and the community, which translates into social IA. Thus, the following could be considered at the micro-level approach:

**Proposition 1.** Cooperatives have a direct, positive and significant impact on social IA creation: human and social capital.

And, considering the role of cooperatives in territories, the following proposition could be considered at the macro-level approach:

**Proposition 2.** Cooperatives have an indirect, positive and significant impact on SD.

All this would lead us to the following model derived from the theoretical review (Figure 2).

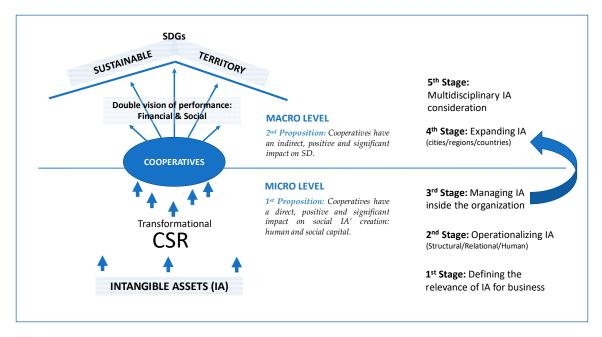


Figure 2. The role of cooperatives in SD: A Multilevel Approach. Source: Own elaboration.

There are countless ways to define how SD can be achieved, but in Figure 2 we show the theoretical contribution made, based on the role of IA. The theoretical contribution of this research is supported by its originality and utility, as two main prerequisites for quality studies, in line with Crane et al.'s recommendations [67]. In cooperatives, social and human capital enables them to create a more sustainable economy in line with SDGs and, for this reason, the micro and macro levels should be combined in the search for SD. This model also supports the current 5th stage requirements for IA research when introducing a multilevel approach to overlap the gap between real economic problems and the goals of companies. This is the originality of the model shown in Figure 2. The model has value for society in general and for the business field in particular.

### 5. Discussion and Practical Orientations

We should highlight not only the role of cooperatives for local development but also their contribution to SD. In this regard, Gordon-Nembhard [21] considers them as collective problem solvers, while Zeuli and Radel [24] argue that "by virtue of being locally developed, locally owned and locally controlled, cooperatives clearly build on a community's human capital, social capital and financial capital" [24] (p. 48). The principles and values of cooperatives are responsible for an innate CSR that justifies social IA. As has been pointed out, human and social capital are reinforced in these companies due to their nature, acting in the SD of the territories where they are integrated. Therefore, these social IA are main actors in the indirect creation of SD. Likewise, cooperatives are viewed as important vehicles for SDGs [66]. Most researchers agree that they are the most appropriate organizations to address all dimensions of both poverty reduction and exclusion [27]. This relates to the importance of social and human capital in these enterprises, which has already been noted.

Although managers, developers and scholars within the cooperative field highlight their relevant role, "most have stopped short of prescribing how cooperatives can be incorporated into community development paradigms" [24] (p. 43). Our study departs from this claim by offering a solution based on IA and trying to create the needed linkages between them and SD and SDGs.

This paper fills an important gap by integrating cooperatives within IA research where have shown how scant is the attention these enterprises have received. In particular, cooperatives are crucial to addressing the role of IA within SD that is the main concern of the 5th stage, as "it explores beyond organizational boundaries and helps address the wicked problems of the world" [7] (p. 2282). To the best of our knowledge, only one study has analyzed the cooperative case [7] at the moment.

In this sense, our contribution is to take a further step forward by offering a theoretical model to link individual cooperative performance with SD and SDGs for future research advancements.

Cooperative movement and governance can strain the social IA that these companies mobilize, especially in terms of SD and SDGs. We highlight that social consciousness in cooperatives also has positive effects on SD, and this is a key contribution to the debate offered by the framework developed in this work.

#### 6. Final Remarks and Main Conclusions

This study examines the role of cooperatives in SD in light of IA. In a more concrete way, the original turning point is arguably the necessary linkage between the microeconomic and macroeconomic orientation we proposed, i.e., the multilevel approach. This paper covers an important research gap because while IA literature has analyzed the effect of firms and their aggregated outcome in terms of economic growth, our paper introduces SD and social IA as a key factor for SD.

We have developed a theoretical framework linking all the relations within a multilevel analysis, which is a novel approach to explaining the cooperatives-SD relationship. Our study is limited in that the research carried out was merely theoretical, but it introduces new insights and critiques by investigating the relationship between cooperatives and SD, that should be analyzed in an empirical way.

# 7. Future Developments

We raise the following questions to be addressed as future lines of research. Firstly, the definition of the constructs and scales involved in the proposed model is an undeniable condition for its future validation. As a previous step in the empirical testing of this model, it will be necessary to validate at least the scale for IA—social capital and human capital—and SD. In this sense, we have found some relevant initiatives to take as starting point: Feng et al. [68] define social capital as a second-order construct with four dimensions: involvement, trust, satisfaction and loyalty; Liang et al. [69] also designed a scale to measure social capital in its relationship with cooperative performance; Castilla et al. [64] proposed a CSR scale for cooperatives; and, recently, Shakir et al. [70] include human capital in cooperatives analyzing competency, working experience and education. Alternatively, SD can be measured using relevant studies as those prepared by the UN Economic Commission for Europe [71] or Abdul et al. [72] for cooperatives.

Finally, the validation of the theoretical propositions will start by transforming the model and developing hypotheses for the relationships between cooperatives (micro level) and SD (macro level). Using a representative sample of cooperatives in all sectors and Structural Equation Models (SEM), it will be possible to test the model and to obtain relevant results about their role in the SD of a specific territory.

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