

Crowdsourcing as an Opportunity for a Responsible Investment Fund? A French Case Study

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Abstract

In modern society, entrepreneurial practices have evolved through the emergence of sustainable development (SD), corporate social responsibility (CSR) initiatives, the consolidation of traditional sectors in the social economy (SE) and the rise of social innovation through technological innovation. In addition, advances in information and communication technology (ICT) enable the general public to become more easily involved in organisational transformations. The term ‘crowdsourcing’ applies to projects that are jointly created by project initiators and citizens. This article addresses the question of whether these citizens, that is, ‘crowds’, should become more involved in sustainable financing organisations that seek legitimacy and socioeconomic efficiency. Ultimately, the question concerns the ability of those responsible for sustainable financing to incorporate these new forms of public involvement and provide appropriate financing for societal challenges. Is it possible for these actors to do this? If so, under what conditions, and how will they have to evolve? A longitudinal case study is carried out to develop a regional ethical, solidarity and crowdfunding investment fund in which the role of the public is clearly defined. We identify the range of possibilities in organisational transformations that are taking place amongst sustainable financing actors.

1. Introduction

Crowdsourcing is a new form of citizen expression and involvement that allows civil society to interact more closely with organisations. This form of citizen involvement has evolved in response to other broader aspects of organisational transformations in civil society as a whole (Cuénoud and Glémain, 2014; Cuénoud, 2017). Indeed, since the advent of the internet, which facilitates interactions between communities and organisations, many relationships have evolved. Communities of citizens have been instrumental in civil society’s adoption of societal debates. Parallel to this, the expansion of sustainable development (SD), corporate social responsibility (CSR) and social economy (SE) have highlighted the importance of the involvement of internal and external stakeholders. One increasingly important stakeholder is the citizen, who as a consumer, voter, resident and so on is seeking to take ownership of issues usually left to more formal actors.

It has become easier and quicker for citizens to participate through the simplification of decision-making and coordination processes. Internet technology has made this possible, and civil society has the will and the desire to get involved. So, where does so-called sustainable financing fit into this new form of expression of civil society? The majority of these actors have

sought to be part of a more general approach to citizen engagement. This engagement can take the form of legal statutes defined as 'representative' by which citizens can become member delegates or administrators. This can also be reflected by the elected representatives of these same citizens engaging with these organisations (e.g., local elected councillors, employee and employer representative bodies). Participation is shown by setting up committees for consultation and interaction with citizens in order to amplify the joint development of new societal projects. However, these forms of citizen expression, if we can refer to them as such, are not always as flexible, rapid and transparent as the practices offered by crowdsourcing, where the crowd can express and assert itself collectively without considering the few representatives of these citizens, however legitimate they may be.

Interaction with interested and involved crowds is essential to the legitimacy of an organisation that describes itself as accountable. This interaction can also be a source of complementarity in the socioeconomic efficiency of sustainable financing. Greater proximity between citizens and project initiators allows for greater closeness in the development of their societal activities (the citizen is also a consumer, a voter, a communicator, etc.). Ultimately, this joint development of societal projects within a local region can reinforce the efficiency of sustainable financing practices (in that agency constraints and information asymmetry are reduced).

This article examines the ability of the actors involved in sustainable financing to change their organisational practices to allow for an easier and more open integration of citizen dynamics. However, several research questions arise as to the viability of organisational changes brought about by crowdsourcing. Through the study of an experimental project for the creation of an ethical, solidarity and crowdfunding investment fund in the New Aquitaine region (France), we will try to answer the following three research questions (RQs):

RQ1: In the current crowdsourcing context, are sustainable financing organisations capable of hybridising their practices (even if it means changing them) in order to better integrate the societal expectations conveyed by a crowd of citizens?

RQ2: With regard to the socioeconomic challenges in local regions between responsible finance institutions and citizens, what are the organisational benefits of crowdsourcing, particularly with regard to agency constraints and information asymmetry resulting from financing local societal activities?

RQ3: It is not easy to incorporate and make room for citizen dynamics in the management of finance tools, even those of a sustainable nature. Where are the potential areas of tension to consider so that the crowdsourcing dynamic can be successful for sustainable financing organisations?

This article will first try to define the issues of citizen appropriation that crowdsourcing imposes on these sustainable financing organisations. Once these definitions and contexts have been established, it will provide the theoretical framework required to implement these civil society connections within sustainable financing (in particular, through the search for greater socioeconomic efficiency in the financing provided to these regions). Then the article addresses the question of whether citizen involvement is legitimate and relevant for economic and financial efficiency and, if so, how it should be addressed. The literature review will help determine the necessary requisites for a longitudinal case study of a project to create a regional sustainable investment fund where the role of citizens through crowdsourcing is clearly examined.

2. Part 1: how should citizen involvement in sustainable financing be redefined? Crowdsourcing as a transformational challenge

Overview of the current situation and challenges of citizen involvement in sustainable financing organisations

The idea of crowdsourcing is not an insignificant consideration for sustainable financing organisations. Indeed, these organisations drive societal dynamics through the funding they make available. The societal issues that they seek to address raise the question of the role of citizens as inherent stakeholders in their organisation. Indirectly, it is the citizens themselves, and therefore civil society as a whole, who are being assessed. How and why do these organisations set up interactions with citizens? The description of the types of interaction between sustainable financing organisations and citizens enable us to lay the foundations of a crowdsourcing relationship based on the following assumptions (Lebraty, 2007: 4, my translation):

[...] crowdsourcing has emerged from Internet use and appears to require the same development factors as free software, namely, motivation, coordination and dissemination [Bonaccorsi and Rossi, 2003]. Secondly, crowdsourcing calls upon a community of individuals who have to solve the problems presented [Von Krogh *et al.*, 2003; Dahlander and Wallin, 2006]. Finally, crowdsourcing requires a certain standardisation of procedures in order to reach the greatest number of people [Tiemann, 2006].

Crowdsourcing, as indirect citizen representation (in a representative democracy), is revolutionising traditional practices in civil society. These practices directly, rapidly and collectively (in a direct democracy) challenge those actors whose societal legitimacy is based on the funding they grant. Sustainable financing is characterised by three main subsets: ethical finance, solidarity finance and crowdfunding. These types of finance have distinctive elements of societal perception, ultimately justifying divergent forms of involvement and appropriation by citizens. The finance types need to be clearly explained in order to identify the crowdsourcing issues that could resonate with current and future changes in this sector.

Until the new millennium, sustainable financing had been limited to ethical and solidarity financing (Roux, 2018). Even though these two types of financing were constructed differently, the search for an ideal type of financing for the common good for society was widely acknowledged (Glémain, 2010). The responsible financial sector has advanced with the involvement of information and communication technology (ICT), which is driving product and process innovation and combining “practices aimed at reconciling performance with social, environmental and societal impact” (Roux, 2018, my translation). Crowdfunding is one of the newer types of sustainable financing from the early 2000s and links citizens and project initiators via an Internet platform (Glémain and Cuénoud, 2016, my translation):

In essence, crowdfunding is collaborative finance. The platform places Internet users in direct contact with the cause they want to support, while at the same time reducing the reference space (territory) of the solidarity investor to that of the Internet network. It serves as an instrument for creating proximity, that is, as a support for putting the individual in contact with the object of their preferred cause. These social internet users are looking for a quick and direct relationship with the causes they defend, causes that reflect their personal convictions, in order to determine their financing capability.

According to Belleflamme, Lambert, and Schwienbacher (2014: 588), crowdfunding can be defined as “an open call, mostly through the Internet, for the provision of financial resources either in the form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes”. Empirically, there are four types of crowdfunding platforms: donations, reward-based, lending and equity (Ahlers *et al.*, 2015). Friends and family are the most important backers in crowdfunding operations (approximately 70%) (Lee and Persson, 2016). Although theoretically crowdfunding can fund projects, the literature has shown that, in general, the majority of projects are funded by social networks (Agrawal, Catalini and Goldfarb, 2014, 2015). In this article, we focus on donation-based funding, which is participatory and adds high value to social activities (not always the case for lending-based and equity-based financing).

Because the means of interaction are not the same for these three types of sustainable financing, it seems logical that citizenship should be expressed in different ways. Thus, the forms of citizen involvement and the emerging issues leading to crowdsourcing within the sector are described in Table 2.1.1.

Subsets of Sustainable Financing	Objectives	How It Operates	Leading Player (France)	Forms of Citizen Involvement	Issues Using Crowdsourcing
Ethical Finance	Considers extra-financial criteria (environmental, social, ethical and governance) in investment and portfolio management decisions	Socially responsible investment (SRI) funds that incorporate the most socially responsible companies' assets according to extra-financial criteria	<i>Novethic</i> https://www.novethic.fr/	NGOs have influence in supporting major societal causes via boycotts. Private shareholders vote at general meetings (notably for the adoption of extra-financial criteria).	For SD and CSR initiatives where citizens are considered as stakeholders in the pursuit of the organisation's overall performance
Solidarity Finance	Based on collecting funds from a variety of sources and advocating fundamental societal changes	A militant form of finance that seeks to support social and solidarity enterprises (SSEs) by focussing on 'excessive' social unity (social solidarity takes precedence over economic rationality)	<i>Finansol</i> https://www.finansol.org/	Citizens are represented in the governance (representative democracy) of these organisations (administrators in associations, staff and union representatives in employee savings funds, member delegates in mutual funds etc.).	As an essential part of the strategic choices of these organisations (there are colleges that are dedicated to citizen representation in their governance)

Subsets of Sustainable Financing	Objectives	How It Operates	Leading Player (France)	Forms of Citizen Involvement	Issues Using Crowdsourcing
Crowd-Funding	Based on collecting funds from a wide audience to finance projects with significant societal added value (cultural, humanitarian, entrepreneurial, etc.)	A type of finance that brings together citizens and project initiators via an internet platform facilitated by collaborative social networks	<i>Financement Participatif France (FPF)</i> http://financeparticipative.org/	Citizens directly finance (no intermediation) the proposed project via an internet platform.	As one of the components of crowdsourcing in the effort to secure funding from citizens (given that citizens offer advice, opinions, recommendations etc.)

Table 2.1.1. How citizenship is expressed in sustainable financing (source: author).

The desire for greater societal involvement has led these organisations to include, in various ways, stakeholders who are considered representatives of civil society. However, looking at Table 2.1.1, it is difficult to speak of citizen participation in crowdsourcing, because they do not fully respect crowdsourcing concept (i.e., more flexibility, speed and transparency in exchanges with crowds). Citizen participation is expressed rather in two forms that tend to become hybrid in the way they function.

First, the implementation of CSR policies through sustainable development goals (SDGs) involves citizens as stakeholders. This form of involvement is likely to lead these organisations to set up consultative committees for cooperation or even for joint development of specific projects. For example: “on a less obvious level, shareholders are trying to influence corporate strategy in order to reduce company emissions in accordance with the 2°C objective of the Paris Agreement” (Novethic, 2018, my translation). At this stage, citizens are considered in terms of their societal expectations as stakeholders; however, they do not have the power to make recommendations for influence or even modify the global strategy of ethical finance organisations.

Secondly, within solidarity finance, citizens can get involved in the governance of these organisations mostly through SE statutes via representative elections (administrators in associations, member delegates in mutual funds and manager partners in cooperatives). The different types of citizen representation are similar to political structures; they are referred to as ‘representative democracy’, defined by Lamoureux (2008, my translation) as “the model that, historically, has dominated in contemporary Western society and is the model that certain Western societies are looking to export to many parts of the world.” The limitations of these forms of citizen representation are that they are too elitist (not all citizens have the right to express themselves), they are not sufficiently transparent (it is difficult to demonstrate all of the organisation’s issues on a daily basis) and they are not responsive enough (constraints in available time, skills, knowledge, etc.). Although solidarity finance can involve citizens in the governance of organisations, what is primarily available to them is only to contribute financially to such funds to the benefit of an ideal society (Finansol, 2018).

Crowdfunding is different because it is an integral part of crowdsourcing. According to Howe (2006), we can call it crowdsourcing when crowdfunding makes it possible to “*get more done*” by citizen contributors and project initiators. The popularity of this method of financing among citizens is indisputable: “according to figures from BFM Business, in the first half of 2014 in France, 66 million euros of crowdfunding was raised and 1 million French people lent or donated funds” (FPF, 2014, my translation). However, it still remains to be confirmed that “*getting more done*” is both possible and realistic for citizens. Although crowdfunding makes it possible for citizens to finance projects with high societal added value, there is very little information on the real involvement of these same citizens on crowdfunding platforms. These platforms generally take no responsibility for any problems that may arise between citizens and project initiators, particularly with regard to any returns or benefits detailed. Very few platforms in France have involved this crowd of citizens in their governance to strengthen their legitimacy as representatives of civil society.

How and why is crowdsourcing used in sustainable financing organisations?

Currently, citizen involvement in sustainable financing organisations is more in line with a representative democracy than a direct democracy. Therefore, it is worthwhile to identify possibilities offered by crowdsourcing in order to better understand how and why a transformational effect within these organisations could be significant. Crowdsourcing can therefore be mentioned when there is a relationship between citizens and project leaders. “Crowdsourcing can be characterised by two elements: an open appeal and a crowd, the two being intrinsically linked. [...] Schenk and Guittard (2009) define it by (i) a large number of heterogeneous individuals and (ii) a priori anonymity” (Burger-Helmchen, 2011, my translation). Howe (2006) speaks of four types of crowdsourcing that illustrate citizen expression (Table 2.2.1). These four categories are not independent; they can and even must interlink with each other. As a result, a project initiator can solicit communities, whether simultaneously or not, making use of their intelligence, creativity, opinions and funding capacity

<p>1. Crowd Voting: based on the opinion of the crowd A well-known example is the Danone brand, which asks the crowd’s opinion when choosing future flavours for its Danette cream desserts.</p> <p>2. Crowd Creation: referred to as the work, whether creative or not, of the crowd, when called upon An example is the AIDES association, which launched a challenge appealing to the creativity of the eYeka platform community, which boasts <i>‘a community of more than 320,000 creative individuals from all over the world’</i>.</p> <p>3. Crowd Wisdom: harnessing the intelligence of the crowd, as stated by Surowiecki and Riot (2008) An example of this is Wikipedia, which is financed by citizen donors, and its content updated by citizen contributors.</p> <p>4. Crowdfunding*: a particularly interesting concept; an appeal to the collective, allowing many individuals to become financial sponsors via Web 2.0</p> <p>* Here, we can illustrate this form of crowdsourcing by the crowdfunding platform of donation that we will study in the empirical part: www.jadopteunprojet.com</p>

Table 2.2.1. Citizen expression through four forms of crowdsourcing (source: Howe, 2006).

There are two major theories about crowdsourcing that clash: some think that the crowd participates only financially and in nothing more, as outlined by Brabham (2013). Others argue that crowds have much more impact on financial organisations than just funding, as Howe (2006), the creator of the crowdsourcing concept, argues. Because crowdsourcing can catalyse the societal relationship between project initiators and citizens suggests that Howe’s interpretation is the most appropriate. The role of networks (via social media, in the communication and involvement processes of the project) and the role of the communities of citizens that form within them are significant in the relationship with the initiator of the project. There may be a reduction of agency constraints and information asymmetry with citizen involvement.

Table 2.2.2 illustrates crowdsourcing platforms to foster the linkage between citizens and project leaders. Thus, the socio-economic viability of the financed projects will be strengthened, to the benefit of sustainable financing. These new project initiators seem to embody an ideal type in the sense that they are trying to find a new organisational ideal

(projects with a social vocation) jointly developed with, by and for the citizens who are involved. Ultimately, crowdsourcing within sustainable financing organisations has a twofold objective: the need for societal legitimacy and the reduction of agency constraints and information asymmetry.

Three crowdsourcing platforms to grow your ideas:	
Idea Bounty	A platform for crowdsourcing creative ideas. Clients are able to post creative briefs and creatives receive a bounty if they submit the winning idea.
Innocentive	Innovative organisations that solve their important technology, science, business, A/I and data challenges by connecting them with a global network of expert problem solvers.
OpenIdeo	People worldwide come together to build on each other's skills and ideas for good.
Three crowdsourcing platforms for graphic and product design:	
CrowdSpring	220,000+ vetted creatives to help with logo to web design to custom business names and everything in between.
DesignCrowd	Freelance designers across the globe competing on projects and have lots of design ideas.
Cad Crowd	Community of CAD designers and 3D designers to help with CAD design services, 3D design services, CAD drafting services, 3D CAD modelling services, CAD file type conversions and so on.
Three crowdsourcing platforms for any specific need for your project:	
MicroWorkers	Ready-to-use templates.
mTurk	A crowdsourcing marketplace that makes it easier for individuals and businesses to outsource their processes and jobs to a distributed workforce who can perform these tasks virtually.
Upwork	Flexible talent solution with millions of jobs posted annually; independent professionals are earning money by providing companies with over 5,000 skills across more than 70 categories of work.

Table 2.2.2. Examples of crowdsourcing (source: websites).

Crowds can be more than just a source of funding, redistributed to societal causes, however wide-ranging these causes may be. Crowds also bring intelligence and insight. They play a major role in circulating information about the project through their own networks and can provide moral support to project leader. Figure 2.2.1 describes different crowdsourcing practices vis-à-vis citizens wishing to get involved: it clearly shows a hybridisation between the nature of an organisation's governance and the degree of openness with regard to participants. Sustainable financing players need to comprehensively transform their approach to citizens, allowing them to speak openly and to get involved at all stages, including in developing the overall strategy of these organisations.

<p>Crowdsourcing: A place where a company details an issue and chooses from a set of solutions (e.g., InnoCentive)</p>	<p>Communities: A network where anyone can put forward issues and solutions (e.g., open-source Linux)</p>	Participatio	Open
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<p>Expert Consultants: A group of professionals chosen by the company; the company determines the issue and the solution (e.g., KPMG, Capgemini)</p>	<p>Consortium: A private group of participants who jointly determine an issue, organise the work and select the solution (e.g., IBM partnerships)</p>		Closed
Governance			
Hierarchical structure	Flat structure		

Figure 2.2.1. Ownership process of socially innovative projects (source: Burger-Helmchen, 2011).

Hybridisation within the scope of governance is already present in solidarity finance, which historically has been oriented towards SE. As for citizens wishing to get directly involved with entrepreneurs, crowdfunding permit to choose projects to fund. Ethical financing should not be overlooked because it has historically recognised the importance of citizens as stakeholders in their organisations (as shown through the many CSR-based projects that have emerged in recent years). Could mixing these forms of citizen involvement enhance a real crowdsourcing dynamic? Citizens can play an essential role in societal renewal of sustainable financing. Table 2.2.3 illustrates the opportunities for production and innovation through this crowd. According to Surowiecki and Riot (2008), for collective intelligence to be effective, crowds must be sufficiently diverse, numerous and independent.

	Origin of Contributions	Goal	Legal Context	Authors
Crowdsourcing	Members of the crowd	Production by the crowd	Intellectual protection	Howe (2006), Lebraty (2007)
Open Innovation	Innovation partners	Opening up the innovation process	Intellectual protection	Chesbrough (2003, 2007)
User	Innovation users	Innovation by users	Intellectual protection	Von Hippel (1986, 2005)
FLOSS	Companies and users	Open Software Development	Copyleft	Raymond (1999), Von Hippel and Von Krogh (2003)

Table 2.2.3. Approaches for assigned production and innovation (source: Schenk and Guittard, 2011).

But many questions remain unanswered about whether sustainable financing can involve the members of this crowd in local regions. Ultimately, the question is whether sustainable financing can reinvent itself. Current and future trends can be seen as opportunities for these organisations in civil society to engage with citizens more extensively: they will then acquire organisational legitimacy and will also be able to benefit from the expertise of this crowd in reducing agency constraints and information asymmetry inherent to all projects that are funded.

The financing of societal needs is becoming increasingly important, so what are the issues concerning entrepreneurial finance?

The financing of ethical, solidarity or crowdfunding projects with high societal added value undeniably requires socioeconomic sustainability of the allocated funds. Crowdsourcing can be seen as an opportunity for these civil society organizations to engage more broadly with citizens: they will then acquire organizational legitimacy and will also be able to benefit from the expertise of this crowd to reduce the constraints of agencies and organizations. information asymmetry inherent in all funded projects. However, the financial theory of the firm was developed essentially for the large managerial firm in an Anglo-Saxon context (dispersed shareholding). Philippe (2014) describes in his work the main financial theories of the literature review (Table 2.3.1). All these theories challenge the efficiency of responsible finance in the same way as more traditional finance. However, the involvement of citizens through crowdsourcing allows access to more flexibility, speed and transparency in exchanges with crowds. The Agency theory and information asymmetry theory are two of the theories which here can be favourably reinforced by the renewal of the “citizen”. Unfortunately, little research focuses today on the search for societal efficiency of responsible finance that could bring crowdsourcing.

Theories	Major contributions
The Classical Theory	VAN: Fisher, 1930; Portfolio theory: Markowitz, 1958; Neutrality of the financial structure: Modigliani and Miller, 1958; Efficiency: fame, 1964; Medaf: Sharpe, Mossin and Lintner, 1964
Option Pricing Theory	Evaluating the options: Black and Scholes, 1973; Extending the approach: Merton, 1974
Agency Theory	Agency costs: Jensen and Meckling, 1976; Theory of free cash flow: Jensen, 1986
Information Asymmetry Theory	Signal: Ross, 1977; Pecking order: Myers, 1984; Myers and Majuf, 1984; Market timing: Baker and Wurgler, 2002
Institutional Theories	Legal Framework: La Porta <i>et al.</i> , 1997

Table 2.3.1. Contributions of key financial theories (source: Philippe, 2014).

Paré and Rédis (2011) suggested a process analysis to define the field of entrepreneurial finance, which they define as “*all of the relationships between entrepreneurs and finance and its associated players, in the context of their projects for the creation, management and development of their business*”. These authors consider three phases: before, during and after creation. It is as relevant that SMEs in their creation as in their growth and development, include short-term financing issues, not only equity financing. However, it appears that a large majority of the work carried out in the field of entrepreneurial finance since the 1990s has focused on the venture capital–entrepreneur relationship, with a view to equity financing of technological

innovation. The involvement of the citizen is only can be studied, in particular in its more recent forms (here, crowdsourcing within organizations of responsible finance).

Faced with these constraints, there is an order in the choice of financing. First, the company must be self-financed. Then, if its internal financial resources prove insufficient, it will look to external financing. The next option is a bank, where the cost of asymmetry is lower than that of the financial market, which is only used as a last resort. This approach is closer to the financing of SMEs, which, as unlisted companies, are not subject to standardised financial disclosure and suffer from greater information asymmetry. Furthermore, many empirical studies on SME financing (Boccaro, 2017; OECD, 2018) note that SMEs rely heavily on banks. However, we are interested in the newest and smallest of these companies in terms of support for activities with high societal added value in local regions in line with the typologies of entrepreneurs financed by the sustainable financing (ethical, solidarity and participative) (Table 2.3.2).

Subsets of Sustainable Financing	Typology of Projects	Source
Crowdfunding	Participative financing by typology of project initiators: VSB/SME, MSC: €775 million SE: €61 million Start-up: €126 million	<i>Baromètre du crowdfunding en France 2019, Financement Participatif France (FPF)</i>
Solidarity Finance	Distribution of forms of solidarity financing: Social land investment: 42.1% Companies with high social utility in France: 32.9% Environmental loan: 10.1% Social loans: 7.9% Strong social utility in developing countries: 7%	<i>Zoom sur la finance solidaire 2019, Finansol</i>
Ethical Finance	Of the 2,060 billion active players, the breakdown is: €1,542 billion in bonds; €696 billion in companies; €699 billion in states; €186 billion in listed shares; €148 billion in supranational organizations and local authorities; €141 billion in real estate; €52 billion unlisted; €23 billion in infrastructure; €156 billion in others;	<i>Spin-off climat - Etude Novethic 2019</i>

Table 2.3.2. Typologies of entrepreneurs financed through sustainable financing (France) (source: author).

In his review of the literature on entrepreneurial finance, Denis (2004) says that, from the point of view of financing, entrepreneurship is faced with the same two fundamental problems as corporate finance: agency constraints and information asymmetry. These two problems are

exacerbated when it comes to the creation, development and experimentation of societal projects, where the economic model has yet to be tested. Size and uncertainty about growth potential (Cassar, 2004; Cosh, Cumming and Hughes, 2009) appear to be the two factors that best explain this problem. Paradoxically, crowdsourcing provides some answers that should be investigated. Table 2.3.2 describes the main types of responsible finance interventions (mainly the creation, development and testing of societal projects). Citizen involvement makes it possible to finance these phases of experimentation while providing more flexibility, speed and transparency in exchanges with crowds, at the origin of better management of agency theory and information asymmetry theory.

Crowdsourcing initiatives could be a credible alternative to reducing agency constraints and information asymmetry for the actors benefitting from these sustainable funds. These problems are greater when the size of the company being financed is small (VSBs and SMEs) and its growth potential is difficult to define (all the more so for projects with a societal vocation). Sustainable financing organisations have tended to operate collectively through mixed financing and support mechanisms. The voice of the crowd could provide a better representation of what civil society wants to increase such funding. Crowdsourcing is not intended to 'optimise' financial risk, but rather, and more important, to improve interaction between the projects financed and sustainable financing organisations. The involvement of the crowd at different phases would make it possible to jointly develop and therefore ultimately reduce agency constraints and information asymmetry. Crowds could give their opinion on a new product range, evaluate marketing messages, strengthen the customer base or even benefit from the multitude of networks within the crowd itself. However, what new organisational arrangements should be made? Sustainable financing bodies have historically focussed on 'representative' citizen involvement. But the civil society is becoming increasingly empowered through more direct, rapid and transparent forms of crowdsourcing. The case study on the creation of a regional sustainable investment fund will enable us to understand the construction of new generation of financial tools.

3. Part 2: case study of a regional sustainable investment construction project (New Aquitaine, France) – Citizen involvement and socioeconomic efficiency

Determining the research design of a longitudinal study

The objective of this work is to determine the scope of possibilities in the organisational changes currently taking place amongst the players in sustainable financing with regard to the new citizen movement known as crowdsourcing. In order to understand the initial effects of these organisational movements, a qualitative study was chosen because the changes are still vague and somewhat experimental. A longitudinal study enabled daily involvement, which led to a process of reflection and redeployment of the players working in sustainable financing within the New Aquitaine region. This work was based on a four-year intervention research project (2014–2018) within local sustainable financing organisations. Historically, these players have worked with several regional groups, which were strengthened on 1 January 2016 by the merger of the former Aquitaine, Limousin and Poitou-Charentes regions to form the new region known as New Aquitaine (Figure 3.1.1 and Figure 3.1.2).



Figure 3.1.1. Sustainable financing actors within the Poitou-Charente region (source: public documentation (actors' website) – Poitou-Charentes).



Figure 3.1.2. Sustainable financing actors in New Aquitaine (Aquifisol) (source: public documentation (actors' website) – New Aquitaine).

This case study describes the process of organisational appropriation of players in sustainable financing (Koenig 1993; Marshall and Rossman, 1995). The case method focusses on understanding the dynamics specific to the environment (Yin, 1994). This type of observation means being “totally immersed in one’s field, trying to grasp all of its subtleties, at the risk of losing objectivity and hindsight” (Soulé, 2007, my translation). De La Ville (2000) identified three possible exploratory approaches: positive perspective, comprehensive perspective and generative perspective. Case study methodology can describe and analyse both players and organisations through participative observation. The phenomenon observed in this case is complex: the renewal of citizen involvement, via crowdsourcing, in the search for societal legitimacy and a greater strengthening of financial risk by the regional players in sustainable financing during the four years of the project. Therefore, the exploratory case study was done with an idiographic generative perspective with a transformative aim. The case served as a basis for reflection, along with other research on the subject, with a view to collectively developing, over time, a theoretical framework that, at this stage, is still beyond our reach.

However, divergent dynamics were still able to help this project by creating a regional ethical, solidarity and crowdfunding investment fund, where the role of citizens is clearly addressed. Because the New Aquitaine region is the largest in France, there are, and will continue to be, regional sub-groups with strong economic, social and even societal specificities. Therefore, this longitudinal case study has been defined with the embedded conceptual framework of Musca (2006), which relies on studying in depth several actors in different sectors of the project.

In terms of methodological precautions, we employed several collection methods using the principle of data triangulation (Eisenhardt, 1989; Yin, 2003; Eisenhardt and Graebner, 2007). From 2014 to 2019, data were collected using the embedded longitudinal case method (Table 3.1.1).

Data Collection Methods	Support Material	Details of Data Collection
<i>Semi-structured interviews</i>	Transcript of six interviews, each of 1.5 hours, during the longitudinal study	Interviews were conducted with the main players in sustainable financing and those public authorities associated with this project to create an investment fund (done voluntarily). These interviews were conducted every year resulting in a total of six interviews over the four-year period.
<i>Participant observation</i>	Transcript from the minutes of each working meeting of the project	Minutes were taken to record the main decisions and strategic choices made during the development of the project. All the people participating in these meetings were listed and they had the opportunity to reread and add to the minutes each time.
<i>Focus groups</i>	Transcript in the form of summaries of the discussions carried out, mainly during group meetings (brainstorming sessions)	The focus groups were organised when the actors involved (sustainable financing players and public bodies) were working together to define the broad outlines of this project during its conception, revision and appropriation stages in accordance with the

Data Collection Methods	Support Material	Details of Data Collection
		constraints observed during the four years of development.
<i>Literature review</i>	Numerous documents consulted, from public sources (information available to all) and from internal resources of solidarity financing organisations and public bodies	This project sought to mix solidarity, ethical and crowdfunding practices through the citizen appropriation of crowdsourcing (a new concept for responsible finance); initially, all the information was used to monitor the subject, and it was then reused here.

Table 3.1.1. Methods for collecting data in the case study.

Outline of the requirements for the reconfiguration of a sustainable finance tool in New Aquitaine (France)

These financial actors were aware of the complexity of involving civil society representation. They were also conscious of the need to benefit from the expertise of the citizens within the various groups of New Aquitaine. These financial stakeholders sought an innovative approach through the development of a sustainable finance tool, taking the form of a “Société Coopérative d’Intérêt Collectif” (SCIC), enabling the hybridisation of representative stakeholders from the New Aquitaine region. An SCIC is a cooperative that is part of the SE where its governance involves stakeholders through a ‘representative democracy’:

SCIC implies a commitment to fundamental cooperative values as defined by the International Cooperative Alliance [...]. The status of an SCIC, in terms of its organisation and objectives, is perfectly in line with the project presented above [...] to cooperate, and to combine and share their practices and activities, in order to be more efficient economically, ecologically, socially and with a sense of solidarity.¹

By setting up the SCIC, the resulting hybridisation make it possible to introduce new organisational practices in sustainable financing. Table 3.2.1 shows the breakdown of stakeholder categories in the governance of the SCIC, which is divided into six categories to guarantee a democratic mix. In addition to using citizen representation methods unique to solidarity-based finance (category 5), citizens will also be able to get involved by crowdfunding with the participation of regional crowdfunding platform: www.jadopteunprojet.com. Since its creation, the platform has collected €910,000 with which 14,208 backers have funded 313 projects. [Jadopteunprojet.com](http://www.jadopteunprojet.com) differs from other French platforms because of its strong territorial anchoring (Cuénoud, 2015). It was able to unite the actors of entrepreneurship by leveraging the various funding and support systems for entrepreneurship projects. As such, it highlights strong requirements that we consider to be competitive advantages in the face of a hypercompetitive sector in France:

¹ My translation of the original text from the leaflet used to present the project to institutional partners.

- 1) Jadopteunprojet.com is a local platform with four offices in New Aquitaine (Bordeaux, La Rochelle, Limoges and Poitiers, its head office): *“Our mission is to provide project leaders with a responsible and local tool for collecting donations and to promote the economic development of the regions”*.
- 2) It offers a solidarity platform for those who want to fight against financial exclusion: *“The FinTechs can and need to be inclusive, otherwise, finance will be associated at exclusion and precariousness...”*.
- 3) It is a platform that wishes to enhance the digital inclusion of entrepreneurs: *“The principle: meet digital experts and based on their inspiring testimony be creative by building a digital project”*.

3.1.2. Categories: Categories are groups of members who have a distinct relationship with the activities of the company [...]. The creation of new categories, as well as the modification of these categories, are decided by the extraordinary general assembly. The following six categories of associations are defined in SCIC-SA:	
1. <i>Operational managers</i>	This category includes all partners who hold an employment contract with SCIC-SA.
2. <i>Support professionals</i>	This category includes any associated person carrying out an activity for the creation and/or development of businesses, who is also able to prescribe to the promoters of supported projects the financing solutions implemented by SCIC-SA.
3. <i>Enterprises financed</i>	This category includes any partner whom SCIC-SA engaged with in terms of financing solutions (equity participation, contributions with recovery rights, associative funds, participatory loans).
4. <i>Local authorities and public bodies</i>	This category includes any person governed by public offices and their groups, directly or indirectly benefiting from its activities, in particular for the economic development of the territory.
5. <i>Solidarity citizens</i>	This category includes any partner contributing by means of investments in companies through creation, development, transmission or takeover on the jadopteunprojet.com platform to increase the activity of SCIC-SA.
6. <i>Solidarity organisations</i>	This category includes any associated person contributing to the activity of SCIC-SA, in particular by means of investments in companies through creation, development, transmission or takeover via the jadopteunprojet.com platform and by their own financial activities: banking, credit or the realisation of works of general interest.

Table 3.2.1. Stakeholder categories in SCIC governance (source: Extract from the statutes of SCIC, p. 24).

For its part, ethical finance builds up the seed capital needed for initial funding (Table 3.2.2). The use of ethical financing, through SRI funds, will encourage the SCIC to produce financial and extra-financial analysis charts, jointly developed by stakeholders, including citizens, for SD and CSR activities. These hybrid approaches redefine here the role of civil society. Experimentation with crowdsourcing by these same players (i.e., more flexibility, speed and transparency in exchanges with a crowd in its collective expression, without giving precedence to citizen representatives) is not as easy when there is already a history of effective

societal practices. Indeed, the hybridization of different responsible finance systems (here, solidarity, ethics and crowdfunding) requires the respect of all parties to define the main strategic orientations of this new kind of financial tool.

Year	2019	2020	2021	2022	Total
No. of Projects	3	15	30	40	88
1. Total amount financed for project initiators	120,000	600,000	1,200,000	1,600,000	3,520,000
Citizen share (60%)	72,000	360,000	720,000	960,000	2,112,000
SCIC share (40%)	48,000	240,000	480,000	640,000	1,408,000
2. Investment reserve (60%)	180,000	900,000	1,800,000	2,400,000	5,280,000
3. Total SCIC funding (40% + 60%)	228,000	1,140,000	2,280,000	3,040,000	6,688,000
Public bodies (40%)	91,200	456,000	912,000	1,216,000	2,675,200
Ethical finance institutions (40%)	91,200	456,000	912,000	1,216,000	2,675,200
Solidarity finance institutions (20%)	45,600	228,000	456,000	608,000	1,337,600

Table 3.2.2. Seed capital for initial SCIC equity financing (euros) (source: extract from SCIC funding plan, p. 6).

This unique approach of hybridising citizen action has many advantages and is in line with the findings of the literature review. The determination to involve civil society once again, through the use of crowdsourcing, not only offers organisational legitimacy as players in sustainable financing but also the opportunity to benefit from the expertise of this crowd in reducing agency constraints and information asymmetry inherent to all financed projects. These two aspects are covered at length in the rationale for the project (Figure 3.2.1).

Citizens can be stakeholders in their own region by investing easily, simply and with total transparency in local projects.
The projects to be financed will be supported and co-financed by players who are experts in the creation, development and takeover of business activities (a guarantee of professionalism and credibility for the general public).
The projects to be financed must have a strong societal impact (to develop, or willingness to develop, long-term economic activity within the region).
Project initiators will have only one 'representative' within their share structure, the SCIC, thereby simplifying relations whilst at the same time affording the opportunity to meet and work with the various colleges of the SCIC that represent the project's stakeholders.
The SCIC can bring together all the stakeholders within the region in order to create a 'leverage effect' in the financing for project initiators. This makes it possible to unite public authorities, private institutions, citizens, associations and project initiators, etc.

Figure 3.2.1. Presentation of promotional pitch for the citizens of New Aquitaine (France) (source: translation of the promotional pitch used by the SCIC, p. 1).

The willingness of these financial actors to pursue a new approach to civil society involvement is backed up by the data collected. However, the elements of coordination amongst all these players should be noted. Even if it is only a prototype, the SCIC's operations have been designed to encompass two approaches. The first is the method of mixing all the players in sustainable financing: ethical finance funds represented by banks and insurance companies, players in solidarity finance through the assistance and finance they provide in supporting their historic business creation partners and crowdfunding with platform www.jadopteunprojet.com (Figure 3.2.2). The second is the way in which the SCIC is involved in the financing of companies. The variety of actors in sustainable financing has led to the definition of a typology of project initiators seeking finance (Table 3.2.3). These actors have been defined as 'socially committed entrepreneurs' who have been established for more than two years and have at least two employees. This choice was the result of discussions and consultation between all the assisted parties used in this project.

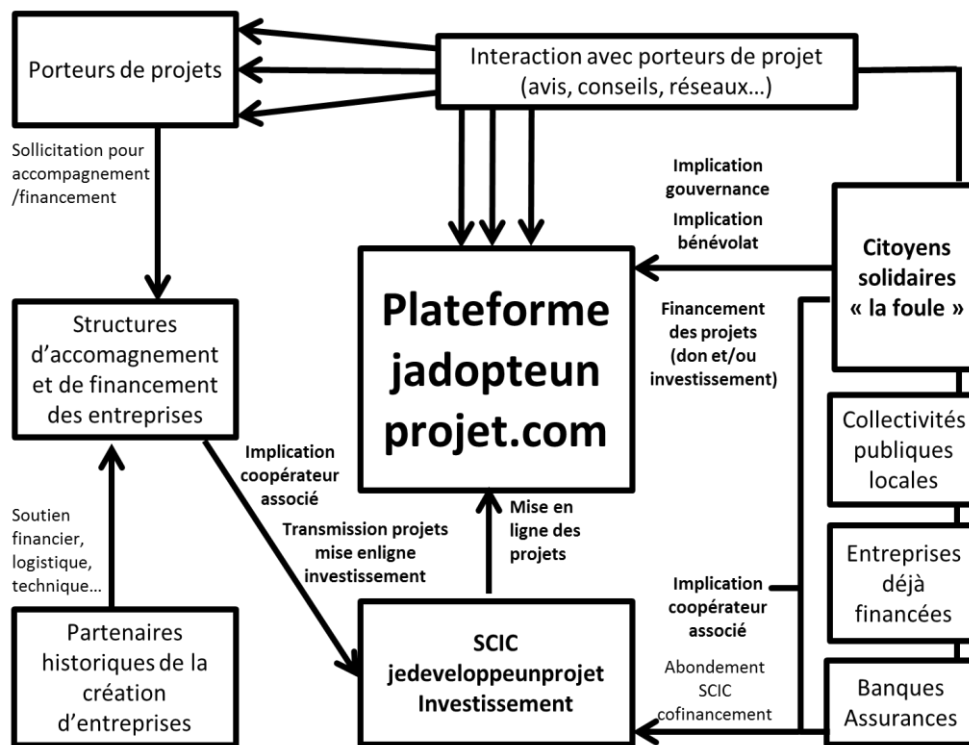


Figure 3.2.2. How the SCIC operates (source: extracted from the minutes of November 30, 2017 – working meeting).

Typology of Socially Committed Entrepreneurs	SME Scale Up	SE Scale Up	SE Start-Up: Creation or Scale Up (experimentation)

Minimum criteria for funding applications	<ul style="list-style-type: none"> - 2 employees - 1 complete financial year (i.e., established at least 2 years) - Positive equity 	<ul style="list-style-type: none"> - 2 employees - 1 closed financial year (i.e., at least 2 years of existence) - Positive equity - Governance review 	<p>Definition: need for strong capital to achieve critical mass</p> <p>Difficulty in obtaining capital injections for structures with SE status (2 to 3 per year)</p>
Levels of funding	<p>Minimum: €20,000 (below this amount, it is preferable to organise crowdfunding fund-raising through donations or reciprocal donations)</p> <p>€30,000 – €50,000 (amount to be justified: recruitment of 1 employee for 1 year for business launch/R&D)</p> <p>Maximum: €100,000 (over this amount, financial actors may get involved)</p>		
Methods of funding	<ol style="list-style-type: none"> 1. Target: participation loan over the long term in order to be considered as quasi-equity (the time deferral making the difference, 7 years in general) 2. Target: equity contribution (although not as simple to implement contribution contract + exit difficulties) <p>Note 1: In associations, entry can be made only through an equity loan (no share of capital). However, this participation loan should be a quasi-personal equity (a 3-year to 5-year time deferral, with interest payments every year, is suggested).</p> <p>Note 2: Involvement also in membership shares and current accounts for those who are looking for a strong balance sheet (with the inclusion of a shareholder agreement).</p> <p>Deciding on the extent of involvement: Depends on the level of commitment of the company being financed (difference between financing and involvement in governance)</p> <ol style="list-style-type: none"> 1. Participation loan with deferred repayment (limited involvement in governance) 2. Convertible bond (the idea of progression in governance, if necessary) 3. Current account shareholders: equity contribution (direct involvement in governance) 		
Risk coverage	<ol style="list-style-type: none"> 1. Participation loan: Guaranteed by FAG (France Active Garantie), guaranteed by BPIFRANCE (such as Herrikoa and IES) 2. Convertible bonds and shares: Only BPIFRANCE can cover the risk, but an equity agreement with BPI is necessary (this can be complicated on small amounts). 		

Table 3.2.3. SCIC typology of socially committed entrepreneurs (source: extract from the summary of December 20, 2017 – collective meeting).

The smaller the size of the company being financed, the more difficult it is to define the uncertainty of growth (which is even more pronounced for projects with a societal value). We have strong difficulty to obtain information and transparency, justifying the link to agency constraints theory and information asymmetry theory. Ultimately, it is through crowdsourcing that these players looked to strengthen the interaction between the crowd and the project initiator to make this new sustainable financial tool viable. They tried to use methods of hybridisation in sustainable financing and they identified a typology of entrepreneurs requiring funding. However, the construction of this hybrid financial tool (through an approach renewed by crowdsourcing) calls out when it comes to its operation.

We do not know how citizens will react and how they will agree to share their involvement with so many financial players during the funding phases over time.

4. Conclusion: An organisational model of sustainable financing centred on the new expectations of civil society

Crowdsourcing is a recent concept that enables civil society involvement in organisations. These citizens are looking to address the issues usually left to representative intermediary bodies. Crowdsourcing offers more flexibility, speed and transparency in collective expression, without giving precedence to citizen representatives, legitimate though they may be. In this way, society as a whole has a greater stake in entrepreneurial practices, particularly when it comes to sustainable financing. As a result, society in general increasingly questions entrepreneurial practices, particularly with regard to sustainable financing and changing organisational practices to incorporate, more easily and openly, new forms of citizen expression. Historically oriented towards 'representative' citizen involvement, sustainable financing is now seeking to update its practices in order to more closely involve civil society: in the governance of solidarity finance, stakeholders in search of global performance in ethical finance and interaction of collaborative social networks and crowdfunding project initiators.

Although these forms of citizen representation have the drawback of being too elitist (not all citizens can express themselves), not very transparent (difficult to demonstrate all the organisation's issues on a daily basis) and not very reactive (constraints in terms of available time, skills, knowledge, etc.), this representation is needed to improve socioeconomic efficiency. From essential societal legitimacy to the reduction of agency constraints and information asymmetry, the transformational challenge of integrating society's voice into financial decision-making is all the more important. Indeed, these two problems are exacerbated when it comes to the creation, development and experimentation of societal projects, where the economic model has yet to be tested (sustainable financing tends to fund entrepreneurs creating or even developing small businesses with high societal added value, etc.).

The undertaking of a case study based on a project to create a sustainable investment fund in New Aquitaine (France) has helped to expand our knowledge of this field. Ultimately, the study of this case from a generative, idiographic and transformative perspective was essential given a theoretical framework that, at this stage, is still beyond our reach. As a result, the three research questions (RQs) were addressed:

RQ1: We were able to determine the ability of these sustainable financing players in New Aquitaine (whether from ethical, solidarity or participative finance) to hybridise the creation of a sustainable finance tool (in particular through the creation of an SCIC investment fund). Citizen expression took various forms of involvement (representative or direct) and strengthened the involvement of civil society through crowdsourcing.

RQ2: We were also able to identify a real challenge in the appropriation of crowd dynamics. Because New Aquitaine is a densely populated region, there are and will continue to be regional sub-groups with strong economic, social and even societal requirements. The involvement of citizens through crowdsourcing practices should help to ensure the societal

legitimacy of sustainable financing, whilst reinforcing its socioeconomic model in the allocation of funds for local projects. The involvement of crowdsourcing at different phases would make it possible to interact, jointly develop and thereby ultimately reduce agency constraints and information asymmetry.

RQ3: It was difficult for us to validate this RQ. At this stage, the experiment is not long enough to obtain concrete feedback from the project leaders. It will be advisable to continue this research work to bring a glance when in the interest of the entrepreneurs to see a civil society more and more involved on their side, even in their financing.

Although this research still needs to be further developed, it shows that sustainable financing should continue to evolve in order to strengthen citizen expression within its organisations. The mix of 'older' as well as 'more recent' citizen involvement (via crowdsourcing), as described in this case study, should now be examined in terms of its operational reality.

Keywords:

Sustainable financing (ethical, solidarity and crowdfunding); civil society; crowdsourcing; region; New Aquitaine (France)

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