



**CATÓLICA  
LISBON**  
BUSINESS & ECONOMICS

Introduction to the Banks of Social Capital,  
the creation of a new institution or how to  
release the power of mass collaboration

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Dissertation submitted in partial fulfilment of requirements for  
the MSc in Management with specialization in Entrepreneurship  
& Strategy, at the Universidade Católica Portuguesa,  
04/01/2017.

## Abstract

As the focus on social capital and information technology intensifies in today's connected world, a deeper understanding of how to harness these two trends is increasingly important. This paper describes how the creation of a new kind of institution could potentially endorse the difficult role of enhancing collaboration between economic agents. Firstly, we will widely describe what a Bank of Social Capital, or BoSC, should look like and the way it operates. Special attention will be further dedicated to its main tool and responsibility: The Virtuous Bond. That is through the fair attribution of this score that the BoSC could exploit that elusive form of capital which is Social Capital. The last part details more pragmatically how exactly this institution would operate and the variables that project holders must fulfil to access the funds. Through this perspective, our study is based on a wide spectrum of fields of research from a collection of interdisciplinary assumptions from Economic behaviour to Technologic and Informatics. It consists mostly of a synthesis work and will try to answer the fundamental question: How can we release the potential of mass collaboration?

### Portuguese Version

Visto que hoje em dia o mundo está cada vez mais interligado através de um foco especial no capital social e na informação tecnológica, é extremamente importante obter um conhecimento mais profundo sobre como explorar e utilizar estas duas tendências. Esta dissertação descreve como é que a criação de um novo modelo de instituição poderá apoiar e suportar o processo complicado de aprimorar a colaboração entre agentes económicos. Primeiro, será descrito como é que um Banco de Capital Social (BosC) deve funcionar. Posteriormente, será dada uma atenção especial à sua principal ferramenta e responsabilidade: a “Virtuous Bond”. Esta instituição, BosC, poderá explorar este tipo de capital social através da atribuição e distribuição justa deste tipo de ferramenta, a “Virtuous Bond”. A última parte desta dissertação descreve de uma maneira mais pragmática como é que esta instituição deverá operar e quais as variáveis e requerimentos que os detentores de projetos deveram preencher de modo a ter acesso aos fundos desta instituição. Nesta perspetiva, este estudo baseia-se num vasto espectro de campos de pesquisa através da análise de suposições interdisciplinares desde Comportamento Económico até Tecnologia e Informática. Consiste maioritariamente num trabalho sintetizado que visa responder a uma pergunta fundamental: Como é que podemos potenciar a colaboração em massa?

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## Acknowledgement

I know we usually keep the best for last but I would first like to thank my thesis supervisor *João Luís Alves César das Neves* of the Católica Lisbon School of Business & Economics. Reactive and pragmatic, his door was always open whenever I had a technical concern. He consistently allowed this paper to be my own work, but always contributed to make it better day after day.

I must express my very profound gratitude to my entire family, specifically to my parents and close entourage for providing me with this unfailing support and continuous encouragement regarding my studies and this project in general. A special mention to Maddie Liner for the hard work of removing the many grammatical mistakes hidden in my work. May her support and patience last forever.

Finally, I would like to thank anyone who participated in this creative process, from the first critics to the yet to come constructive feedback. This idea has evolved throughout the years and will surely keep moving forward thanks to those who took an interest in it.

Because this achievement would not have been possible without all of you, thank you.

## Introduction

A Bank of Social Capital or BoSC is a suggestive term to help understand what is the concept behind this new institution and what it stands for. It consists of the combination of two concepts: The word *Bank* refers to a financial institution licensed to receive deposits and make loans. Banks also provide other financial services, such as wealth management or currency exchange. The second term *Social Capital* is trickier to define. Its meaning disputed and unclear for substantive and ideological reasons (Dolfsma and Dannreuther 2003; Foley and Edwards 1997) it makes the scope and definition of a BoSC extensive. Therefore, we will consider Social Capital as social relations that have productive benefits, facilitating economic transactions.

Indeed, like other forms of capital, social capital is productive as it makes possible the achievement of certain ends that in its absence would not be possible. It is the term “Capital” which emphasizes that social capital, like human capital or financial capital, is a source of production: It enables us to create value, get things done, achieve our goals, and contribute to the development of the economy. While other forms of capital may indeed be socially beneficial, they are used mostly to benefit those who own it. Social capital, in contrast, although benefiting individuals, is expected to produce goods or services that are more collective than just individual. These benefits we find most generally associated with social capital are called mutually beneficial collective action (MBCA). Because this type of capital exists elusively between people and within social interactions, it can hardly be directly measured. However, the overall participation to MBCA and its consequences are positive productive outcomes that can, in theory, be estimated more easily. One concrete example among others which plays a major part in this institution is the use of “mutual funds”. In the same way that Social Security handles your medicals expenses when in need, mutual funds will finance projects which have accumulated enough MBCA and which are, on paper, ready to be launched: it is the common pot.

In this complex context, a BoSC can be understood and considered as a financial and social institution enabling the redistribution and expansion of MBCA. As such, the development of this work will firstly discuss the main characteristics of a BoSC and how it differs from traditional banks. The second part will analyse the notion of what we call the “Virtuous Bond”

and how it can be issued before diving into the functioning system in the final section: Operation.

## BoSC Description

### Purpose and aim of the institution

Banks greatly contribute to the efficient allocation of economic resources. By funnelling the money to successful businesses or projects with high potential, these financial institutions give them the opportunity to grow faster and possibly better. Furthermore, these same institutions, mainly commercial banks, are responsible for the vast majority of the money in circulation in the economy and demonstrate our clear necessity to fund the economic landscape.

The main purpose of a BoSC is the same as any other financial institution: economic growth. Only the method differs. A BoSC may add value to an economic landscape by nourishing and redistributing a circular flow of Data and Funds. Its aim is to create more efficiency and impact on the economic landscape by funnelling not just pure monetary support but non-restricted collective assistance as well. The overall purpose of this new generation of institutions is to harness the power of mass collaboration with the aim to reduce cost and facilitate the co-conception, co-production and consumption of goods and services. A BoSC thus gives a good reason for individuals, enterprises and other organizations to contribute and collaborate with one another: the creation of a score new of its kind. To successfully harness the potential of mass collaboration and enhance help between economic agents, this new institution must establish, issue, regulate, estimate, attribute and distribute an innovative but representative score that we will call a “Virtuous Bond”. The theories and methods which form the basis of this score will be further discussed in the second part of this dissertation, as well as its expected impact on the global economy.

Due to this difference, the BoSC is not just a financial institution. As these banks determine the amount of points to distribute to MBCA, they also endorse the role of the financial market on the industry they serve. Sellers and buyers, in this case project holders and contributors respectively can now match their interest in terms of borrowing and lending support and contributions. As opposed to the financial services proposed by traditional retail banks, a BoSC through its Virtuous score would give access to a well-connected network that allows people to extend social relations with productive benefits. This platform, therefore, can be used not just to raise capital but also and primarily to reduce cost through the sharing of relevant data and

the mutualisation of expenditure. The facilitation of financial and social transactions through this new score leads to a decreased cost of transaction and information. Actions such as establishing connections with organisations and associations of like-minded persons, disseminating knowledge and information to other economic agents, raising awareness and donations on issues would now be possible at no mercantile cost.

Therefore, the real and main mission of this new bank is to regulate this Virtuous score by keeping its distribution stable, fair, and insuring a constant redistributive flow among project holders. Acting as a social and financial intermediary, a BoSC has the potential to make mass collaboration a tangible reality as we turn a mutually beneficial contribution into another economic asset.

On a daily basis, the BoSC mission is to stimulate its community. Its principle mission is to fairly reward people's contributions to other projects, meaning providing a fair reward of Virtuous 'Points'. The other is to expand its business coverage according to the necessity of its community. If a project holder lacks support in a specific area of its project, the BoSC will make sure that the information circulates properly and that the contributions get highly rewarded.

## Structure of the Institution

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### *Founding and owning a BoSC*

In the same way for any bank, it is very hard for anyone to create and run a commercial bank. Because of the tremendous amount of regulations, a BoSC cannot be run by just anyone. The process of creating the bank is very complicated and getting approval from the monetary authority is very hard. For this reason, the entrepreneur who senses an opportunity in a specific market and has the internal capabilities as well as the minimum capital required, must still endure a very long bureaucratic process which would certificate his or her ability as financial expert.

An institution can be understood as a set of rules that a certain organization imposes into society. For an institution to be recognized as such, it must receive approval from either the government or society. To ensure credibility and authenticate the quality of the service provided by this set

of rules, BoSC founders will have to go through several existing processes of accreditation already applied to commercial banks as well as a new charter application process specific to a BoSC. By signing this moral engagement, funders engage their responsibilities to respect criteria imposed by the convention within and outside the organisation. Only once founders complete this entire procedure does the creation of this institution become possible. Therefore, not everyone can fund and own a BoSC.

### *Flat hierarchy*

While this institution would need recognition or at least some kind of support from the State, it is equally important that a BoSC remains independent from it. Given the fact it is an innovative structure, the formal and bureaucratic world would not suit such an organization. Instead, a flat organisational structure would better manage hierarchy this disruptive innovation, allowing for flexibility in the management and a meritocratic leadership which would facilitate creative thinking and promote collaboration internally.

### *Internal capabilities*

The internal capabilities mentioned earlier are crucial to launch such an institution. They include the expertise of the director's board, as well as the operative staff necessary to run the platform on a daily basis. Mainly, the role of the employees is to spread collaboration across the BoSC market. To do so they will have to make sure that the Virtuous Bond issued is coherent and circulates efficiently within the BoSC ecosystem.

Therefore, several departments are critical to a BoSC. Firstly, there are technological requirements which must be dealt with. As it deals with a colossal amount of data and funds, a BoSC must be able to both generate and redistribute them. Consequently, the database needs data scientists to manage it, strong protection to avoid criminal hacking, and of course an aesthetically pleasing design to convince final users. Furthermore, given that a BoSC would issue cryptocurrencies this technology needs to be operated internally as well. Secondly, the law department will play a crucial role as many legal issues will be raised during the creation and the running of the institution. These issues will be detailed further in the "regulation" section. Thirdly, but equally as important, is the financial and economic department. Issuing the Virtuous Score is a core feature of a BoSC and as such a thorough economic understanding



and daily calculations are decisive elements to ensure a proper maximization of this bond. Besides these three main components of the BoSC structure, classic departments such as Marketing or Human Resources could be added to help this new financial institution to outperform. These departments are conditional depending on how far the BoSC is currently developed. However, there is one specific profession which is key to the institution's success: Community Managers.

#### *A supportive people-oriented community*

The operational staff's unique aim is to make mass collaboration possible. But without communities, mass collaboration is not conceivable. For Social Capital to be shared throughout the institution, members first need to share common interest or at least a sense of belonging. Social interaction is the cornerstone of this institution and employees have to make sure everyone can benefit from these connections. As opposed to the traditional banking scheme where customers only interact with the bank, customers become a well-connected network of contributors, co-designing their own projects.

Anyone can potentially join a BoSC. As long as these individuals and organizations have an interest in the business coverage of the institution, there is no restriction in joining. While the ultimate purpose is to develop a project, there are no requirements regarding this project's form. Indeed, as a project is a personal endeavour over time, having a finished idea to contribute from the start is not necessarily mandatory. Nonetheless, the vast majority of BoSC members are project holders, meaning people or organisations who are willing to carry out interrelated tasks carefully designed to achieve a particular end goal. The rest of the participants will be commercial entities participating in the making of these projects through their presence in the BoSC market place.

In order to incentivise Mass Collaboration, contributions are oriented towards the needs of the community itself. Everyone is encouraged to help everyone else through the distribution of the Virtuous Score. As we now focus on the individual's needs, the crowdsourcing process (outsourcing a specific task to a large number of people) can be applied to the personal exigencies of the project holders. Indeed, the total amount of project holders ultimately forms a crowd of people with a common interest: the making of their project. By closely monitoring each other's progress, they are inspired to help with the realisation of each other's projects.

### *Specificity of the Redistributive Monopoly*

Having different Banks of Social Capital operating within the same market would result in a loss due to a cannibalisation of the needs. The more exclusive the supportive network, the more value (capital and contribution) can be redistributed. Therefore, a BoSC should limit its coverage to a specific market or targeted communities. That essentially refers to a group of potential consumers who is interested in purchasing a related type of products and services. These markets need to be general enough so the adequate number of people could potentially participate in it. But it also need to be specific enough to exclude a majority of unrelated involvement.

This specificity allows the BoSC to group people with a shared interest together. It focuses on support, research and innovation, on the needs of people and enterprises or on the main challenges the industry is facing. Spreading Social Capital through this new ecosystem would contribute to the efficient functioning of modern economies and the stability of liberal democracy (Fukuyama 2001 ; Kenworthy 1997). More importantly, it allows a redistribution of wealth freely among contributors in the specific market.

### *Circumscription of the Monopoly*

The circumscription of the monopolized industry is based on and defined according to the specificity of the industry and the community's needs. If tomorrow there is a critical mass of people willing to collaborate and help each other to eat healthily, then this vision becomes the new market which then internally regroupes many industries. Healthy eating involves many fields: agriculture tips, logistics, scientific research on consumer behaviour and biology, technological innovation, etc. All of this involves many different shareholders.

Because it would only impoverish the redistribution of the resources, a BoSC must define precisely the scale of its operation. As not anybody can create a BoSC, it becomes easier to prevent the different banks from having their activity on the same industry. If a department specific to a BoSC has already been created within a Central Bank, this organisation in charge of delivering the charter application process specific to the BoSC will verify that the new applicant does not hinder the activity of an existing player. In the case where a “Central BoSC” department within the Central Bank has not yet been created, the BoSC will have to apply what

they preach and collaborate between one another to make sure the circumscription is legitimate and coherent. Instead of imposing some restrictions, the BoSC must find ways to create bridges between different markets and ultimately create wealth together.

### *Decentralization*

The structure of this Institution aims to offer innovative solutions to existing difficulties. As markets and communities are all around the world, having other perspectives and extended possibilities is what makes this well-connected network so valuable. Contrary to classic Banks, a BoSC doesn't limit its member business coverage to within its own regions but aims for a decentralized approach. As many communities today are completely decentralized, the goal is to spread virtuous contributions through an international and distributed supportive network.

### *Physical facilities*

As described, the purpose of a BoSC is to facilitate the making of people's projects by giving access to financial and human support. As an innovative and decentralized structure, it does not specifically require physical facilities to operate. However, this feature would be a strategic move in terms of business development. Today, online banking has become quite ordinary, and the reduction of cost it generates forces some banks who have been settled for a long time to close their offices. If the tendency continues and more normal banks start to close their facilities, it opens up an important opportunity for a BoSC to take over the offices and use the already trusted commercial property to develop its community on important spots. By proposing physical facilities in strategic places such as big cities, different kinds of people could be reached and convinced to participate in this new banking system. These physical facilities could be equipped with technological support such as augmented reality helmets which would facilitate decentralized collaboration. In addition, these physical facilities could simply be hubs or co-working spaces where contributors come together to support each other. People who need help to get started would benefit from a direct and offline assistance, while those who help would increase their Virtuous Score.

## Type of projects undertaken

As we just saw, a BoSC is structured around communities of people and their projects. The sector of activity is defined by the shared interest of the project holders regardless of the nature of the project or the moral status of the entity. In the case of the BoSC for healthy food for instance, an individual could aim to consume sustainably healthy food by having it delivered directly from the fields every week, as well as launching a profit-oriented salad shop. An enterprise could organize seminars for its employees as well as expand its activity vertically. NGO's already operating in these fields could start to profit from their involvement (through the Virtuous Bond) or extend their impact with a big communication campaign. Governments and citizens could undertake the construction of a greenhouse in the neighbourhood or co-write the next law about carrot regulations. It is this diversity of options which makes this system appealing; quite simply, the more diverse the community, the richer the experience. Projects are now upgradeable by and through the community. What started as a simple project of consumerism can now become a personalized co-creative process.

The BoSC is very inclusive because their core feature is their ability to allow people's goals to converge through the Virtuous Score. By being involved in other projects, no matter how big or small the contribution- whether simply answering a business survey for the salad shop salad or offering an idea for a slogan for the NGO campaign-, contributors get closer from having their own project funds due to Virtuous compensation. As everyone is invited to participate, the project can be personal or professional, private or public, aiming for profit or impact, etc. The more complex the community, the more a project can be undertaken, meaning the better the solution.

## Criteria for decision

Projects which are eligible for the funds now fully rely on three variables independent from any potential ROI or guarantees from project holders.

The addition of these variables determines a score for each project which in turn creates a ranking of the projects. On a regular basis, be it every day or every month for example (it depends on the nature of the market), the accumulated financial resources will fund the first projects until they are exhausted.

Therefore, the main criteria for being financially supported is the completion of the three following variables:

- The Online Specification or **Completion of the project**: How complete, precise and traceable online is the project
- The **Social Involvement**: How many Virtuous Points has the project holder accumulated compared to the final cost of the project
- The **Donation**: How much donation has been made or received compared to the final cost of the project

A more complete description of these variables is detailed in the third section: Operation. Now to avoid any excess or fraud, some key bearings need to be determined. For every bearing, different demands can be raised. For example, once the project gets into the first half of the ranking, an official proof of price estimation may be requested; for the top 20%, a mandatory peer review would evaluate if the project can indeed claim the amount asked etc. It is this peer review executed by the community that saves time for the institution as it will only have to verify the projects which are about to be funded and not go through all the projects.

### Origin of the funds

Traditional financial intermediaries such as banks limit their role to only match the borrowers with the creditors and then take interest out of the transaction. In the case of a BoSC, the system is different. As previously stated, one of the three variables to have access to the funding is Donation and that is where the overall BoSC budget comes from. Following the same ideology as crowdfunding- where small individual contributions allows for big projects to be entirely financed- here, the first projects get funded by the total amount of small contributions obtained from the entire community. Just like collectivist or mutual funds, it is the contribution of each and every member which provides the required financial resources to make the funding happen. The funds therefore mainly come from project holders' savings.

Instead of putting their money in a savings account with an interest rate almost equal to that of inflation, people can now put their savings into these mutual funds in order to gain credential and move up the ranks in the funded hierarchy. Thus, given that it is almost mandatory to donate in order to have access to funds, there is no longer a need to charge interest. And because the

fund relies now on equity and not on debt anymore, money can be used without any interest. Again, a more detailed explanation is provided in the last part: Operation.

### Source of profits

Typically, financial intermediaries currently gain profit by earning higher returns on their investments than they pay for their sources of money. However, the BoSC relies on other sources of revenue as the system is free of interest and therefore, not compatible with traditional financial arrangements. In regards to the values it wants to communicate, a BoSC should adapt its price strategy. This institution should not focus too much on profit. But because it deals with funds and produces data, there are many ways a BoSC can extract value. Here are 10 potential ways for the BoSC to generate profits (however, the list non-exhaustive):

#### *COMMISSION ON TRANSACTION*

Just as Amazon takes a small commission from the seller on any transaction, enterprises who make a sale through the BoSC would have to give away part of this profit.

#### *COMMISSION ON SUCCESSFUL FUNDING*

Meaning commission on the final funding of the project. That is the current revenue stream of approximately 90% of existing crowdfunding platforms. Once the project is funded, a rate between 2 and 10% is charged from the total amount of funds raised.

#### *VIRTUOUS POINTS BOUGHT BY ENTERPRISES*

In theory, only individuals have Social Capital. As they must share it to get funded, they therefore have access to an unlimited amount of help from the community. On the other hand, the help that a moral entity brings could simply be their core activity. For an obvious question of fairness, it is not conceivable that an enterprise accesses this supportive network in the same “unlimited” way that individuals have as it could be used as dishonest competition. Therefore, either a monthly subscription or the purchase of Virtuous Points could give enterprises access to the support of the community.

#### *COMMISSION ON EXCHANGE RATE*

If it does not raise legal issues, the BoSC could, like any current institution, take a small percentage of commission between the Virtuous bond and the real currencies circulating on the platform. The profit would be taken from the difference between selling and buying.

#### *CONSULTING HELP PACKAGES*

As it's a new system which could be considered complex, people or companies may need help to optimize the attribution of their resources. While a part of this help can and should be provided by the community, specific packages delivered by the BoSC such as financial arrangements or marketing advice could speed up access to the funds. The BoSC could help communities better attribute their investment, better formulate their needs and as such improve the overall profile and development of the project.

#### *IMPACT INVESTMENT FUNDS*

As the BoSC has a lot to bring to social ventures, this institution also enjoys a strategic position in the area of impact investment. Proposing solutions such as the creation of a fund of impact investment specifically related to the community would allow BoSC contributors to put their savings into projects that have a high return on virtuous grade, a social impact and potentially a direct personal benefit.

Because this kind of investment allows project holders to complete two variables at the same time, (Social Involvement and Donation) slots will be limited and the BoSC could apply a price discrimination policy for a more selective access to the funds.

#### *TARGETTED ADS*

As with most market places, advertising is a great way to acquire a decent revenue stream. But because all projects are precisely detailed and varied, the advertising can be more targeted and diverse than ever before. By producing very specific advertising or sending the needs of project holders to relevant companies, the BoSC as an intermediary could recuperate an important fee out of the premium connection established.

### *PROJECT PRIORITISATION*

If the project holder has some time constraints and can't afford to naturally ascend the ranking, in exchange for extra compensation, (s)he could prioritize the involvement of the community by increasing the reward of its request or appearing at the top page of the website when it comes to Donation, etc.

### *LINK ECONOMY*

Today, many initiatives and start-ups are launching a P2P market place. They want to disrupt a specific market by combining offer and demand. However, these “uberisations” are vulnerable to fail because of one crucial factor: the network effect. The fact that these businesses work only when there is a mass demand is the reason why they fail. Now, having a bigger institution which aims to connect and reward this P2P interaction is an opportunity to drive traffic on these struggling platforms.

This partnership could therefore be a source of profit as the website or even their users directly would now start to receive Virtuous Points for the things they were already doing for free. The bargaining power and the potential that the BoSC represents for smaller platforms to drive traffic on make it possible to monetize.

### *GENERATION OF RESEARCH*

More than gathering data, the BoSC is a primary source of information. Mass Collaboration would generate data that can be monetized by analysing the process of crowdsourcing. Behavioural and psychological research can be obtained from big data. In this way, the BoSC could contribute to Social and Economic Research that would eventually get published.

Now, it is important to note that not all of these methods can be considered desirable, but it is equally important to understand that the BoSC wants to differentiate themselves from any other financial institutions. Short term profits have become less important than the overall sustainability of the business. If a BoSC is willing to collect a part of the value it creates, the only way it can ensure sustainability is by redistributing this wealth. The more wealth gets reinjected into the system (by buying Virtuous Bonds for instance and therefore raising a



project's market value), the more the continuous flow of a project's funding participates in the creation of a never ending virtuous circle. The more value the BoSC extracts and reinjects, the more sustainable the market.

## Regulation

In order to be officially and legally established as an institution, an example of successful and sustainable platforms should first be established. As we are currently living in an open economy, the establishment of the first BoSC as a start-up or a new generation of a crowdfunding platform could serve as a model for financial regulation.

Because of the role they play in the economy, financial institutions are heavily regulated in most countries. Laws and related initiatives differ according to different countries. Regulatory structures and policies will always differ according to the country in which they operate. However, it usually involves 3 aspects: prudential regulation, consumer protection and market stability. The complexity lies in the fact that such a system will be used at any given place in the world. Therefore, the BoSC will have to deal with all different types of law in vigour of each country in which it operates, risking a potential brake in the growth of this system.

### *Prudential regulation*

From a Macro prudential perspective, the BoSC will be influenced by the current regulations in vigour in the same way as any other economic agents would. However, we can expect a shift in the regulative landscape once the BoSC redistributive model is recognized as an institution. Countries such as the USA have been particularly proactive regarding the regulation of crowdfunding platforms by creating a new statute specifically designed for them. In the future, the creation of an international statute for this specific type of financial institution would be desirable to facilitate the development of this system worldwide.

The BoSC represent a too powerful structure to serve personal interest. Moreover, their credibility fully relies upon the trust people put in this new kind of institution. In this context,

more so than an international convention, founders would need to sign a moral engagement of their commitment to the system and the values they aim to promote.

### *Consumer protection*

As we are talking about a financial institution relying on individual contribution, there is potentially a lot of regulation in vigour regarding consumer protection. While it may add complexity to the overall functioning of the system, it also aims to provide market transparency to final users. Legal crowdsourcing questions have already been raised in the past and with the democratisation of this process we can expect them to come back on the table. Of course, some points would need to be clarified, such as the type and limit of contributions people can process in regards to the working laws in each respective country in order not to clash with the local legal working system. The same reasoning applies to donation and whether tax exemption would be possible or not for example. The BoSC will also have to show flexibility on other points such as privacy rights or product liability in terms of its operational system.

### *Market Stability*

Furthermore, to maintain confidence in this financial system, the convention the BoSC would have to sign ensures stability and transparency and reduces the risk of financial crime and transgression by providing a set of criteria to respect, such as minimum capital and other restrictions related to the amount of currency issued. The creation of the Virtuous Score may also expose the BoSC to more complexity in issuing its own bonds as a legal tender would have to be established. To address all these complexities, the easiest way would probably be to create a department within an existing Central Bank which would be in charge of establishing stability and cooperation among the different banks. However, because of all the bureaucracy that institutions must endure to operate, this option would probably take a lot of time. Meanwhile, the same empirical measurements would be applied that existing financial institutions currently face, such as the Merton Model or the Systemic Stability Measures.

## The creation of a Virtuous Score

### Description

The BoSC, unlike classic banks, considers more than just financial capital but the social capital of its contributors as well. To exploit and measure the outcome of this specific capital (MBCA), we need to take new criteria into account. To handle this difficult task, a BoSC will issue an innovative bond we would call a “Virtuous Score”, a relevant term to describe this first notion of its kind.

This system of scoring and its criteria have the potential to be a powerful form of social technology. The ways in which it is designed and controlled will unavoidably influence the effect it has upon the BoSC community and eco-system. The “virtuous” part of this score simply means having or showing some moral standards. We can consider these virtues as an expression of capital to the extent that they are instrumental in improving an individual’s personal quality of life. The aims of this score are to extend the spectrum of values we consider when we transact between each other. By doing so we can start scaling and spreading virtuous actions.

However, this score will be valuable only if people judge it as fair and equitable. As it is supposed to reflect the wealth of an action according to terms other than just economic ones, people must believe its value and distribution are legitimate in order to spread the value of these values. The real *raison d’être* of the BoSC is therefore to make this financial trigger as coherent, stable and representative as possible. This is made possible thanks to emergent technological tools such as Big Data or Cryptocurrency, but as well and before anything else thanks to the recording and monitoring of moral values defined by the community itself and considered as important for and by society at large.

### Defining the community values

The way this score is issued will be described further. Firstly, it is important to understand the pre-established moral values upon which this score is built. To make the Virtuous Score as

representative as possible in reality, there is first a need to elect the moral values by which the community wants to be judged.

While the number of moral values this money relies on is potentially unlimited, we do not want to add too much complexity in its monitoring. A fair number of values could be approximately 10, as it allows for a fairly complete picture while also selecting the more important ones. Obviously, these moral criteria will always change depending on the nature of the BoSC. However, we can expect some moral values such as “quality of the social interaction” or “gratuity” to be common regardless of the industry it serves.

To establish and select the most important values for the community, BoSC managers will have to choose out of a panel of values, according to the most relevant ones for the industry. In the case of the BoSC for healthy food consumption, criteria such as respect for the environment or the overall nutritional benefits of the products could be selected. By choosing few but relevant criteria and values to live upon, we can give a global strategic direction for the entire community.

Once the BoSC board of Directors has selected the more relevant and practical moral values, it is time to estimate the importance of each of them. To value intangible and elusive concepts such as values there is no easy way but a democratic one: The Wisdom of the Crowd.

In 1906, the statistician Francis Galton observed that the median guess of a crowd of approximately 800 people was more accurate than any individual estimation. Based on the assumption that the median is centred near the true value of quantity to be estimated, we could ask each individual through surveys and studies to provide their own estimation of each moral value. Either through direct estimation: from 1 to 10 how much do you value the price reduction as a healthy eater?, or as a comparison: as a healthy eater, do you value more ecological protection or price reduction? - Through the attribution of these surveys, we can obtain numerical estimations as well as ranking the significance of the moral values by which people want to be judged.

As the way we perceive moral values are subjective, elusive and contextual, we will never be able to obtain an absolute value. But we can obtain tendencies that people can accept and relate to because of the inclusive and democratic nature of these obtained results. Because, after all, there are only opinions, there are no right or wrong answers, only a direction to take as cornerstone for valuation.

## Recording help and collaboration into transactions

Now this score is not going to reward any kind of transaction. It is important to distinguish what we reward from what we don't. On one hand there are traditional and commercial transactions. On the other hand, there is the concept of Social Involvement. Social Involvement can be understood as all the action that one does which helps and supports other people as well as showing concern for collective welfare in general.

As individuals living in society, it is not too much to assume that we all take part in these two kinds of transactions. Commercial transactions tend to be more regular because we rely on them to live, while Social Involvement usually brings more benefit to others around us. When project holders ask for help, they do not expect to have to pay anything. These contributions aiming to answer other project holder's concerns are therefore social involvement.

By recording the Social Involvement relevant to the elected moral values and rewarding them, we can turn these positive actions for society into mutually beneficial collective action (MBCA). Indeed, these contributions are transformed into MBCA from the moment we start recording and rewarding them. Because Virtuous Points are necessary to obtain the funds, a project holder, by helping other project holders, first helps him or herself. Consequently, a relevant record of the Virtuous Score is needed. In some cases, only the people concerned will be asked to value the contribution through a self-assessment survey (from 1 to 10, how helpful X was) while in other cases the entire community can be involved. Let's say a project holder needs a translation to sell its healthy vegetables abroad. The translation obtained from other members of the community will be evaluated regarding specific criteria to the action. Some factors could be evaluated technologically: rapidity, richness of the vocabulary; while others would be recorded by the community: overall quality, creativity, cultural immersion etc.

Even better, we could convert a simple transaction into Social Involvement if the Virtuous Score brings more profitability. Imagine a good costs 20 to produce and it is usually sold at 40. If the community estimates price reduction as very important for its well-being, selling this good at 20 could be more lucrative as the compensation in Virtuous Bonds would be more important. The amount of virtual points received will therefore depend on the degree of respect for the moral engagement in the action. To do so, we need to establish a ladder with the minimum and the maximum of each value. For example, if we judge an action by a criteria of

creativity, people (the one involved in the transaction and the rest of the community) will have to judge whether the operation was completely innovative or whether it has been done one thousand times before. Feedback allows us to attribute the value in each action. The type of action possible will be further described in the last part: Operation.

### Potential controversy

Using a financial mechanism such as points to operate the normal method of social collaboration may raise several conceptual questions on the feasibility or potential benefits of such a system. If we base our reasoning on the assumption that all goods are commensurable, then all values and virtues can be translated without loss into economic terms. But because there is always a gap between theory and reality, turning virtues into economic values could be controversial.

Instead of spreading collaboration we could spread mercantilism by refusing help to another's economic transaction. There is a risk to destroy the virtue in every action by putting a price on what used to be genuine (for some individuals at least). For this reason, we need to be careful when it comes to the criteria chosen and the way we issue these points. We need to base this score on the values defined by the community and make sure it does not follow the same market rules that a good or service would do. Almost inevitably, the virtuous character of some actions could be affected. Genuine help could be less spontaneous. But despite the fact that our motivation may not be based on an authentic sense of duty, if good actions spread, the positive outcome of extending help would outweigh the lack of real involvement. On the other hand, certain norms, values and beliefs are conducive for MBCA. In particular, norms such as trust, reciprocity or group loyalty *predispose* people to work together and to help each other achieve agreed-upon goals.

Because to get funded, project holders must accumulate these Virtuous Points. In this context, this requirement turns the Virtuous Bond into a sort of “store of virtues” where gathering these points, and therefore helping each other, is mutually beneficial and as such becomes the new norm. If people trust the score to be fair and objective, we can then spread its helpful character between economic agents. If people believe in the estimation, they will consider that others would act equally as rationally and ethically as they do, which means they would act in the interest of others for their own personal interest.

## Issuing the Virtuous Score: BoSC responsibility

Therefore, it is the responsibility of the BoSC to handle the potential spill-overs of using a financial asset to trigger social collaboration and make sure negative effects are negligible compared to the positive consequences. But BoSC responsibilities go beyond just applying theories. To be accepted by all, this collaborative institution must fairly acknowledge the value we usually do not consider in transactions and redistribute it with consideration. As the BoSC aim is to redistribute the biggest value possible to its contributors, it is important that it has a more efficient way to estimate the Virtuous Score than asking for feedback at every transaction. Issuing such a complex and innovative process forces the BoSC to use different economic and technologic instruments in order to capture efficiently the real value within each contribution.

This score represents a bridge between the financial market and the social virtues and morals present in society. As these two worlds may be connected together now, the BoSC must endorse the role of absolute authority between economic agents in order to bring stability and trust in the new bond.

### Building trust

There are different ways to create trust and acceptability in this score. The fact that the BoSC, a recognized and regulated institution, issues this “virtuous liquid asset” should build some kind of confidence at first. Having this recognized organisation as an intermediary implies transparency, control, explanation and support. The second trust builder of this bond is its nature. Without going too much into technical details, this score works through Blockchain technology, which strongly reduces risk and cost associated with external intermediaries. This protective technology which is usually used to decentralize transactions will ensure even more transparency and security under these distributive circumstances.

The final determiner of trust is ensuring fairness and therefore acceptability in the reward. Contribution must be fairly rewarded and the reward accurate and coherent with the action undertaken. As a result, this score aims not just to fulfil a function of trusted intermediary but represents a complex process engaging different features and variables.

## Building accuracy

The fact that the moral values serving as criteria are defined by the crowd is an integrative and democratic way to establish an accurate value. However, we can't rely solely on crowd wisdom to determine the reward of each action as this system is not efficient enough. To help accurately automatize the virtuous payment, other criteria is taken into consideration. Thanks to a close monitoring of the data, we can obtain clear tendencies of the worth of each ethical transaction and complete this artificial analysis with human feedback. The more data collected (in order to obtain Big Data), the more accurate the reward. Machine Learning is therefore going to play a key role in this model as the more transactions are processed, the more we can improve the estimating algorithm of the reward. The technology here mainly serves the need for velocity in the transactions while human participation ensures the coherence and logic of the reward.

The last determining criteria is the economic one. Although ideally we would want the reward of this money independent from economic fluctuation, and these virtues free of any speculative incident, the estimation of a contribution can't be 100% free from economic reality. Therefore, we will consider the market rules of Supply & Demand as well. If every contributor is willing to offer creative help to other project holders but no one is looking for new ideas, then creative insight will be lightly rewarded. On the other hand, if a lot of people are looking for free stuff but only a few people are willing to give away, this generosity will be heavily rewarded. Letting the market of social involvement self-regulate itself is essential to reach a general equilibrium and maximize global benefit.

## Distribution

As the BoSC is accountable for issuing this score, it must be equally responsible for its distribution. In fact, because this structure is the only one able to issue a score of this kind, it is therefore the only one able to distribute it. The BoSC provides an unrestricted connected support to its contributors. This support from the community is unrestricted of any counter-part because the BoSC is the one in charge of rewarding the social involvement and administering the Virtuous Score.

Therefore, the Virtuous bond is not going to circulate directly between economic agents but through the intermediary of the BoSC. The fact that project holders do not have any counter-



part to provide when asking for help allows to stimulate demand and therefore create wealth on the market of Social Involvement. While we can expect abuses from this non-restriction, a fair equilibrium could equally be found. Indeed, the more other agents begin to accumulate this social bond, the faster they get their project funded. Asking for too much volatile help will benefit others more than it benefits the one in need.

## Exchange Rate

This score is only a nominative value of the total amount of social involvement accumulated and recorded through the BoSC. However, this notation not only has face value but also indicates a market value which needs to be kept in mind. Even without directly being a currency, this score is measured compared to the final cost of the entire project. Because all these actions are worth something financially, this score represents a store of values that is not neutral. In this way, someone who has helped more than their project has costed, could in theory convert this accumulation into real currency through the establishment of a strategic exchange rate. For instance, this excess of points could be considered directly as a donation and therefore supplies the amount the project holder needs to give away to get funded.

## Operation: **THE SYSTEM**

For these explanations, we can use the example of a BoSC operating on the real estate industry. If I want to buy a property in Portugal, unlike many other banks, this BoSC could fund my project, regardless of its purpose whether recreational or professional. Nevertheless, I would have access to funding, not because my project represents a good opportunity economically speaking or because I can bring in enough guarantees. This time, the access to the funds will depend on the three variables:

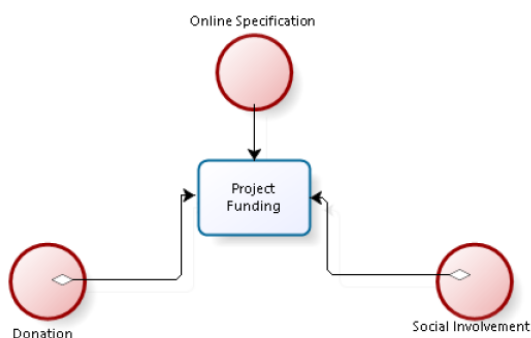
**Social Involvement:** How helpful I am for the community or my project's ethical responsibility regarding the pre-defined values of the community. I would gain Virtuous Points by helping

other project holders within my field of expertise, creating relevant connections etc. In the case of real estate this help would mostly be in the form of local information and geographic knowledge of prices, opportunities etc.

Moreover, if I plan my house to be 100% self-sufficient in renewable energy, the project would receive more Virtuous Points for every contribution I make because ecological protection is highly valued by the community estimation.

**Online Specification of the project:** Where I, as a project holder, know exactly how much the project will cost, where the money goes and to whom, and where all these details are online and checkable. To equip this ecological house, I will ask the community to put me in contact with local enterprises for cost estimations or relevant people who could help me with it. As long as I am not satisfied with the offer, I can keep on asking for help from the community without direct counterparts. Only the BoSC provides Virtuous Points for the Social Involvement of others.

**Donation:** Compared to the final price of this house- obtained thanks to the detailed Online Specification- how much money I gave and/or how much I received. By contributing to the mutual funds, I am allowed to fulfil this variable by giving money to other projects. Further distinctions will later be described between both types of donation and how it reduces the final cost of the funds.



Each of these variables represent 33% of the final %. The final % is the addition of these variables and will determine a score for each project. Thanks to this scoring, it is possible to create a ranking of the different projects. Once the score is calculated, the top projects will be funded until the financial resources available, provided by the mutual funds, are exhausted. This system emphasizes our meritocratic values as we now consider the ethical behaviour, thanks to the Virtuous bond, as part of the capital and bargaining power of the individual.

## MODEL EQUATION

To have access to funding, three categories of actions are taken into consideration: recording the online specification of the project, providing a social support and donating to others. It can be translated as:

**Online Specification:**  $OS_i = \sum_{k=1}^n P_k$  where  $P_k \in T_i$

Where T= transaction; P=Price of this transaction; i: the project; €= Euro

Online Specification represents the overall cost of the project. It can be described as the total amount of transactions required to fulfil the project, verifiable online, multiplied by the price in € of each of these transactions.

This measurement is used to calculate the ratio of the two other variables. To be valid, it must provide all the supportive documents that some members of the community will be asked to review and confirm. A form of “project template” will help approximate the missing step by detailing every micro-task or aspect of the project which could potentially be taken into consideration (type of materiel, features, etc.) and therefore estimate a % of progression.

**Social Involvement:**  $SI_i = VP_i * X$

Where  $VP_i$ = The amount of Virtuous Points accumulated by the project holder;  $X$ = the exchange rate calculated by:  $\frac{VRT}{EUR}$ :  $VRT$ = the index price of the Virtuous point;  $EUR$ = the index price in EUR

This measurement is essential to understand the impact of the project holder on the community and to ensure that what they provide in terms of involvement is somehow proportional to the amount they are asking.

**Donation:**  $Di = [(1 - x) * DMFi \text{ €}] + [x * DSPi \text{ €}]$

Where  $DMFi$ = Donation made to the Mutual Funds by the project holder;  $DSPi$ =Donation made by the project holder to Specific Projects and  $0 \ll x < 0.25$

Project holders must provide donations to the mutual funds in order to fulfil this variable. By doing so they are allowed to dedicate a % of this amount directly to the project of their choice. The addition of  $DMFi$  and  $DSPi$  determines how much the project holder has donated.

We can convert these actions into rates:

$$\text{Social Involvement Rate} = SI_r = \frac{Si}{OSi}$$

We capture here how much the project holder has contributed compared to how much the project costs.

$$\text{Donation Rate} = D_r = \frac{Di}{OSi - DR}$$

Where DR= Donation Received which is equal to the amount of DSPi dedicated to this specific project

$$\text{Online Specification Rate} = OS_r = \frac{OSi}{osi} \quad \text{if } OSi = 1$$

Where 1 means the community has validated the specification and 0 it has not.

From these values we can obtain an index to calculate percentages. We can then equally ponder those percentages in order to obtain one final percentage which, when compared to all the other percentages, will be used to obtain the final position of the project.

The amount of contribution received into the mutual funds will finance the first projects until the funds are exhausted.

As a result, the more involved the project holders, financially and socially, the faster their projects are funded. This process of funding is orchestrated by a regular and constant turn-over depending primarily on the nature of the industry the BoSC serves. In the case of our real estate example it would probably be every month. That means at the end of the month, the BoSC blocks the amount of DMF and funds with this amount, the first project of the ranking. If there is only enough money for the two first projects, the rest of the money will go back to the mutual funds of the next month and the project which was third will now be in first position, and so forth. These turn-overs must be pre-defined coherently by the BoSC's direction for efficiency as it defines the speed of funding for the entire industry. By having a large turn-over, more wealth can be accumulated and therefore more demanding projects can have time to be properly

developed. This turn-over could be daily for basic needs such as food, monthly for complex industries such as real estate or even yearly for ambitious projects such as the space conquest industry.

### The first variable: Social Involvement

The role of the BoSC therefore is to incubate and calculate the social input and impact of people's actions directly contributing to other's projects. Contributions are recorded through the glance of the Virtuous Bond and its pre-established values by assessing surveys to project holders. This survey or direct feedback allows us to determine at which degree values have been respected. For example, in the case of my 100% environmentally sustainable home, if one of the values is "quality and relevance of information provided", the contributors will get the maximum amount of Virtuous Points from this criteria only if the information they provide is helping me to fulfil this vision.

All these interactions between project holders and the platform implies one strong economic virtue: the ability to cooperate. Given its already essential role today for economic prosperity and financial stability, cooperation becomes even more essential to make this system work fairly and productively. As the idea is to remunerate the social involvement in regards to which degree the action undertaken is aligned with the community's values, we need honesty to create fairness. We want to value the social wealth behind human cooperation and dedicate a bit less importance to the economic one. The first variable is therefore the very base of the system and the only real innovation. It is the concrete solutions which have the potential to incentive and democratize ethical and useful behaviour. That is why we will dive deeper into this variable than any other.

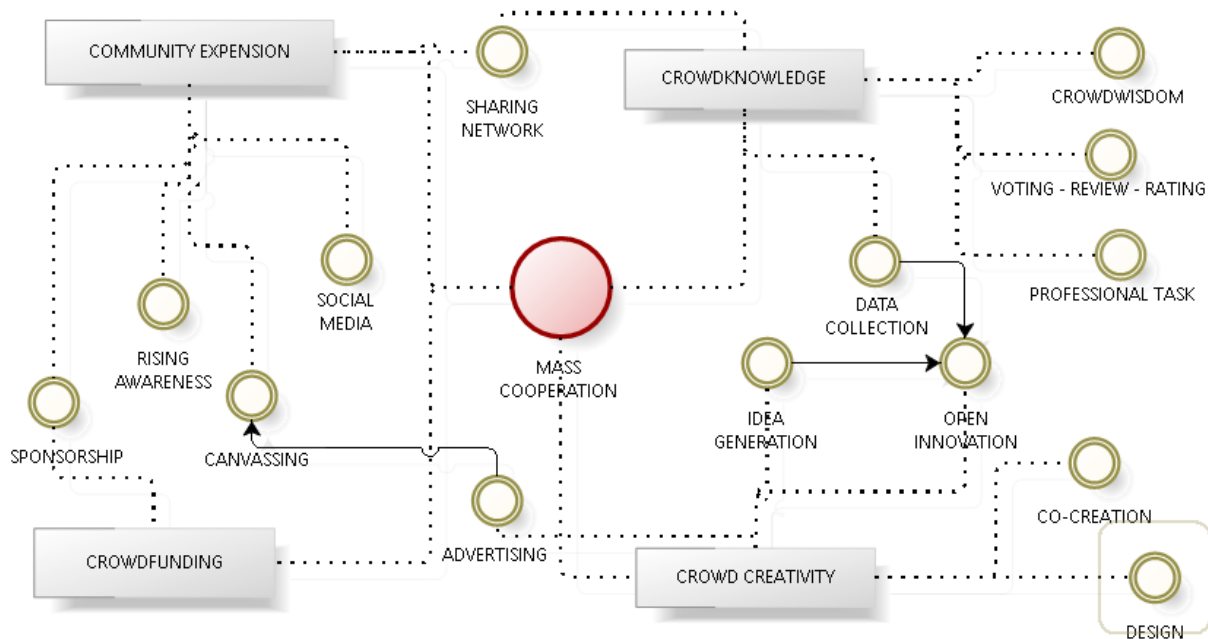
Social Involvement can be understood as all the action that one does which helps and supports other people as well as showing concern for the collective welfare in general. It is all the good practices and small positive inputs that add value to society at the individual level, within large groups of people with a common interest. It is the result of behaving ethically and sharing social capital in general. It already exists everywhere around us; we just don't really consider it. When someone behaves ethically, we usually do not reward this behaviour with economic incentives as it is commonly accepted by society to behave to the ethical standard. We only punish if the behaviour is harmful in some kind of way. For example, an enterprise that pollutes will pay extra tax. However, we rarely reward those who remain clean.

This Social Involvement variable is the economic recognition of this good behaviour. It's the individual helping others, it is the start-up societally oriented or the activist committed to re-established fairness. It already exists all around us and that is the reason why we need the BoSC. All these actions, positive for society, are creating value that we don't consider as valuable from an economic point of view. If we pass these positive actions through the vision of the BoSC and reward them fairly with the Virtuous Score, we can start accounting moral actions and spread them through the liquidity of the virtuous bond.

It is for this specific type of social investment that we need the Virtuous Bond. As the whole community is incentivised to get involved in the well-being of the ecosystem, the crowdsourcing process contracts the ideal condition to make mass cooperation thrive and enhance individual freedom through collective action. If we have a look at the most famous sample of crowdsourcing, Wikipedia, a collective contribution offers the entire world access to the most updated and accurate encyclopaedia in the world. If people's contributions can democratize universal knowledge by annihilating cost and risk while improving the overall quality of the content, it is a process that we would need to spread to as many fields as possible. Now this may not be achievable in every field but this process of crowdsourcing can be used by the BoSC in many ways.

The 4 types of crowdsourcing used as Social Involvement within a BoSC

We saw earlier how critical this process is to help estimate the Virtuous Score with accuracy. But there is much more than feedback which can be asked of individuals to fulfil this first variable. Because crowdsourced actions rely on limited individual input, contributions are often too negligible or the amount of participants too important to be rewarded for the actual value it has brought. This breaks the crowdsourcing expansion and thus is the main feature the BoSC addresses through the evaluation of the Virtuous Score.



**Creative Crowdsourcing:** The process of gathering novel and useful solutions for creative tasks. From marketing and advertising to writing and designing, there are many creative tasks which can be undertaken to fulfil both extrinsic motivation as well as enjoyment based motivation. As the BoSC is a creative structure, this type of crowdsourcing must be developed.

One main and current limitation of this existing type of crowdsourcing is its form. Currently, creative crowdsourcing mainly takes place under competition where only the winner is rewarded. Today, we can't reward everyone's submission because it would be too pricy for the client or the intermediary to pay all the participants, or at least the best ones. This means that a lot of imaginative ideas get lost as rewarding only the winner can discourage mass participation.

To harness the power of mass creativity, we must start rewarding every contribution. We must consider innovative concepts and value other perspectives. In the BoSC, creative contributions are rewarded not for the final outcome but for the potential value it could bring. A minimum amount of Virtuous Score could be attributed to every "out of the box" thought and this amount would vary according to criteria such as quality, novelty, originality or boldness of the submission.

**Collective Intelligence:** The shared knowledge or group intelligence that emerges from the collaboration and competition of many individuals. It can be understood as an emergent

movement (Wikipedia or even Google is a form of collective intelligence) which mostly relies on the synergy between data and knowledge collection, together with expertise and software. It is this main feature that the BoSC relies on.

Any doubt, request, question or requirement a project holder is concerned about is an opportunity for the community and its collective intelligence to contribute and express itself. Through votes, reviews and other forms of feedback, it becomes possible to improve individual projects and address global challenges in a much more complex way. Let's say I am hesitating between two specific materials for the design of my house. The community can offer me pros and cons of each material, but not like Wikipedia would. The crowd can personally answer my doubts according to my personal vision and in coherence with the rest of the project.

More importantly, the entire system of redistribution of the BoSC depends on one dimension of this interconnected process: crowd wisdom. As we expressed previously, the participation of everyone in order to estimate the values of the Virtuous Score is absolutely crucial. By asking everyone of the importance of each of the values and virtues (for instance, from 1 to 10 how much do you value safety compared to boldness or which is the most important between environmental protection compared to environmental prevention etc.), we don't just democratically consider what people think, but it is also a smart way to prioritize accurately the value of these values. The average of this giant provision of estimation will provide tendencies that the BoSC and its Virtuous Score can exploit as the cornerstone to fairly reward the different types of contributions.

**Community Expansion:** Often, the capacities of an existing crowd are not enough. In order to keep on answering challenges and people's requests, it is important that this crowd keeps on renewing itself by collecting and gathering more people and projects. In this case it is necessary to extend the ecosystem: that is the Community Expansion. It is the act of "recruiting" the part of your network which could be the most relevant for encountered challenges. If I am looking for a house in Portugal, I will choose a recommendation from my network rather than from advertising because this intermediary facilitates trust. More generally speaking, it consists of mobilizing individual's Social Capital in order to cover more area of expertise and gather a deeper collective knowledge. If I need a good plumber in Gabon for example, all the people participating into the process of recruiting him will obtain Virtuous Points. That's an opportunity to reduce the marginal cost of contributor's acquisition while expanding the community worldwide. It is like sharing a job offer: it is a convenient way to participate in the global effort, create a win-win and almost passively be rewarded for it.



**Crowdfunding:** The act of raising capital from many people. It is an important feature of the BoSC. A smart financial contribution could bring many social involvements if the funds serve a great project in need. However, for an obvious purpose, it belongs to the third variable: Donation.

### The second variable: Online Specification

This component of the system will specify the details of each little step of the project and who will take care of it. The project holder will obviously be in charge of this task as it concerns the fulfilling of their vision and is the more apt to do so. However, the project holder is not alone as the Virtuous Bond can now provide a crowdsourced network of services to help perform this referencing task. For any questions or specific information required, there is now someone willing to help.

With this new model we are looking deeper into people's ideas and goals and how to make them coherently work with others of the same interest. By pushing the documentation and specifications online, we can identify where there is need for clarification, where the community can contribute and what and whom can be financially or societally helpful.

Now, not every project holder will be willing to publicly expose its project and the potential secrets it holds. But as the money of the mutual funds actually come from others, some kind of transparency must be imposed. In that case, the degree of confidentiality and openness could be adjustable. In the same way that Facebook let us choose the degree of confidentiality of the information we want to share with the rest of the world, project holders will be able to choose to whom, each information could be disclosed and shared.

The BoSC will have to make sure the project is properly detailed. It can provide a typical framework or pattern for specific kind of projects. Suggestions to project holders or recommendation of people able to help would facilitate this process as well. Because not every project holder is on the same development stage in their project, some have a very precise idea of their goals and the resources to pursue them, while others only have the willingness. It is precisely that difference which make this system possible. That factor of readiness is what distinguishes those who can be funded from the others. Because not everyone fulfils this variable in the same time, we can redistribute the funds fairly.

There are many benefits of turning a project holder into a project manager and a community into a solidary support. Doing things together can allow the BoSC managers to better understand the industry it serves as now consumption becomes transparent and traceable. Marginal Cost of project can be reduced thanks to economy of scale. If there are 1000 houses which need to be equipped in solar panel, the more generous suppliers will be the one obtaining the contract. Thanks to the Social Involvement and the reduction of information gap, the supply chain can be optimized. My house in Portugal will cost much less if I have local willing to share good opportunities and professional network with me. Contributions can be focused on specific needs of the project. In other terms, what was simple consumerism is turned into a more elaborate personalization.

However, it is not a variable because of the benefit it has the potential to bring but because it is a mandatory step in order to make sure that money is well used. In order to have access to funds, we need to be able to estimate the amount of financial and social contribution required (Social Involvement & Donation) by the project holder.

Having a project means having a long term vision on this volatile and short term world which is Internet. This, represents one of the main challenges of this variable as well as the time required and the technical difficulties to digitalize and record everything online.

### The third Variable: Donation

The third variable to have access to the funds is Donation. Just like the first variable- social involvement-, applying this component in our daily consumption would represent a small shift in our current process but the consequences could represent lasting benefit. The little change is this: what if instead of everyone borrowing liquidity off everyone else, everyone donates to everyone. That may sound like a naïve or Marxist idea, but economy of scale, mutualisation or synergetic action are examples of economic reality, and the financial advantage of participating in this system while having a positive impact is what should make people change their behaviour.

The process of mutualisation for instance is what makes insurance and social security possible all around the world. If we could expand this process to our entire economy by making it more flexible, we could drastically reduce our marginal cost. However, the main reason why people

should start participating in that social and financial shift is that we could reduce the negative influence of two very controversial economic topics: Debt and Taxes.

Debt, firstly, because if we now can consume by donating, there are no more reason to apply interest rates to funds. We saw that the BoSC has potential revenue streams other than the traditional commission on interest rate. Because we can now remove them, money has no more cost and we don't need to create money which does not exist (debt) to stimulate the eco-system. Project holders do not have access to funds through credit anymore, but through equity.

In the long term, the consequences of the social involvement and the donation together could remove the burden of taxation. Not that charity is already in some cases tax deductible, but that if people can now donate to the institution, social enterprise, NGO or even individuals that can take care of some urgent issues, there is no more need for an excessive state imposition.

Last but not least, the main reason why people would like to consume in this way is that we can use this shared-equity as an advantage to strengthen our social capital. By being able to choose to whom our contribution goes, it is now possible to have access to funding by giving to our network and more precisely to our friends and family. Parents could invest in property by giving to their children. An activist could consume by putting her saving into NGOs. Companies could turn their investment into gifts for potential prospects or existing customers and allow a double leverage of the money: one financial and one social.

### The 3 types of donations

Concerning this variable donation, there are 3 different ways to fulfil it:

#### *Mutual fund*

The first and main way is the participation to the general or mutual funds. It is a classic type of mutualism such as social security where everyone contributes to fund the ones in need. It is this fund which funds all the projects of the BoSC. Depending on the financial turn-over of project (monthly in the case of real estate) it will fund the more deserving project, meaning the project ranked first this month.

The advantage of this type of participation is that it is possible to take back the money anytime. As money is landed at no interest, in case of trouble, contributors can take back their money

and only the number of projects funded that month will slow down. Obviously, there is an opportunity cost that could represent a loss by itself, but it is negligible compared to the value that the crowdsourced supportive network brings obtained from the rewarded social involvement.

#### *Personal donation*

Participating to the general funds gives access to the second type of financial contribution: the crowdfunding or personal donation call DSP in the equation. For every 1€ of participation into the mutual funds, up to  $\frac{1}{4}$  of the donation can be attributed to chosen projects. That way, it is now possible to fill this variable by giving money to our network. Depending on the nature of the project or the relationship with the project holder, this provision could bring virtuous capital or even a “strong” social capital. In this case, the money cannot be taken back as it now belongs to other projects. However, funding a project with a social or societal purpose brings social involvement as well, which would make this riskier investment a more profitable one.

#### *Donation received*

This is the other side of the coin and the final way to fulfil the variable donation: receiving donation. This, in turn, does not increase the number of donations which must be provided but instead reduces the amount you have to give. Through this main shift, we can now emancipate projects from the cost of transaction and debt interest as we now rely on equity provided by a strong network. Even better, we can leverage a project by giving and receiving from the same person, as it will increase the donation received while reducing the amount to provide on both sides.

### Further development

Such a system remains very contemporary. Components such as Crowdsourcing, Social Capital or Cryptocurrencies are still not widely understood today, or rather many boundaries prevent us from exploiting their full potential. Even if technologically and technically flawless, there is no guarantee such a system would fulfil its function as a redistributive financial market. As this system is people-oriented and relies mainly on community contribution, trust and incentives

must flourish to convince people to participate in it. Mentality is probably the hardest thing to change. As irrational beings, social proof and financial advantages will have to be understood by all to surpass the fear associated with novelty. Furthermore, since some current professions could suffer from this disruptive model, we can expect some kind of lobby in certain sectors. In this light, the one fundamental element this system must have, in order to convince the critical mass required, is trust. More than just further studies on the subject, there is a necessity to create a first prototype of a BoSC in order to see what differs between theory and reality. Applying this system of redistribution to a small market on a small scale would allow us to pinpoint deficient elements before further development can be made.

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