

Article

Catholic Social Thought and Sustainability. Ethical and Economic Alignment [†]

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Abstract: In this research, we demonstrate that business sustainability can be a model to foster in order to reach real development, as it is shown that business sustainability has both an ethical and economic logic. Even though, from an ethical point of view, sustainability can be well-founded on human rights and civic ethics, our goal in this paper has been to sustain and enrich business sustainability based on the Social Doctrine of the Catholic Church, which can be shared in its advises by many non-Catholic people, as it is a rich source of wisdom. We have also studied its economic logic; analyzing why it is justified for sustainable companies to obtain good results, formulating the model to alleviate the agency problem (which allows it to overcome the traditional stakeholder model), studying empirical analyses that demonstrate the good financial performance of sustainable companies, and making a new analysis that confirms the above.

Keywords: business sustainability; social doctrine of the Catholic Church; economic ethics; economic development; social economic progress; financial performance; ESG indices



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1. Introduction

If we analyze what happened, at least since the first industrial revolution (which began in the second half of the eighteenth century), it seems clear that humanity has prospered greatly in the sense of having a growing supply of goods and services. This has led us, in our environment, to enjoy a high standard of living for the average population, while we have achieved that essential services such as health, education, or other social benefits are guaranteed. However, we cannot hide that this optimistic vision also has its shadows, and very important ones (Sen 2000).

First, we would highlight the inequality on our planet: there are really poor countries, especially if we compare them with the richest ones. The extreme poverty of so many human beings who fail to meet their basic needs is the main tragedy for our economic system, and very pronounced inequality is not compatible with a healthy economy either (Keeley 2015; see also the award of 2019 Nobel Prize in Economics to Abhijit Banerjee, Esther Duflo, and Michael Kremer, “for their experimental approach to alleviating global poverty”, The Nobel Prize 2019). This largely explains the massive migratory flows that are occurring in Europe or America (Castles et al. 2014). On the other hand, the severe crisis that began in 2007 has also increased poverty and inequality in our immediate environment (Keeley 2015). In addition to this, every day more alarms are triggered regarding the environment: climate change, waste accumulation, etc. (Przychodzen et al. 2018). Recently, the covid-19 crisis has hit our economy, with a foreseeable major impact on wealth and inequality.

We need to work on a sustainable development, which allows us to serve the basic needs of all human beings, reduce inequalities, and respect the planet and its inhabitants (environment, ecology, etc.). The economy tries to generate wealth and distribute the

generated wealth, we have to look for models that manage to do this while respecting human rights in its three generations—political and civil rights (first generation); economic, social, and cultural rights (second generation); and environmental rights and right to peace (third generation); [Vasak \(1977\)](#), [Cortina \(1994\)](#).

The economy and politics must address these challenges thinking of the entire planet, especially in an era of globalization like the current one: it is necessary to find models that allow all human beings to exercise their civil and economic rights, and for this, from the field of economy, we must ensure that we all have real possibilities of accessing basic goods and services, and to a development that improves the quality of life ([Sen 2000](#)). However, this very broad vision, these goals, exceed the objectives of this work; our contributions will go in that line, and they will be able to contribute to getting us closer to those goals, but we will focus more on the companies role.

In recent years, concepts such as corporate social responsibility (CSR), sustainability, socially responsible investing (SRI) ([BEE 2018](#)) are gaining strength. They address the need for the economy and its agents to respect the interests of all society (including generations to come); this is what we will generically call “sustainability”, and this idea must be based on ethics and economic viability. Sustainability can be based on strong ethical bases (such as the aforementioned human rights); in this work we will try to base it on and enrich it with the Social Doctrine of the Catholic Church, of which we can find a magnificent and recent exponent in the encyclical *Laudato Si’* of Pope [Francis \(2015\)](#). Similar topics have been faced in scientific journals, such as *Rivista Internazionale di Scienze Sociali*, *Research in Social Sciences* or *Religions* (see e.g., [Garofalo 2012](#); [Bidard 2014](#); [Tatay-Nieto 2020](#)).

However, it is necessary that sustainability be also economically viable. We believe that, here, there is a clear moral responsibility for economists as we must strive to ensure that companies respect the rights, legitimate interests, and fair aspirations of the people with whom they relate (stakeholders), but they still create wealth for the society that is what allows economic progress.

Although we will explain it in more detail in the following subsections, we advance here the objective of this research: we try to justify business sustainability in two ways that are, in principle, relatively independent. We want to see first that sustainability has an ethical foundation, for which we will rely, above all, on the Social Doctrine of the Catholic Church. In this way, we will review the main documents where it is defined, extracting the ideas that can support business sustainability, and also those that can help us take a further step towards a more committed sustainability. However, whichever is the philosophical foundation of sustainability, we have already said that sustainable companies must create wealth for society. In our economic system this is measured, normally in the first place, by the increase in the value of the companies, so sustainable companies must be profitable. Fortunately, as we will see later, there are both logical reasons and abundant empirical evidence that sustainable companies are as, or more, economically efficient than other companies. Sustainable companies can be equally or more profitable than non-sustainable companies ([Gómez-Bezares et al. 2016](#); [BEE 2018](#)). This is the objective of our paper: to justify sustainability ethically and economically, introducing original ideas and results in both approaches, understanding that both justifications are necessary to make the model attractive.

1.1. Sustainability as an Ethical and Economic Construct

The title of this paper summarizes well its scope and content: “Catholic Social Thought and Sustainability. Ethical and Economic Alignment”. Indeed, what we intend is to analyze how both civil ethics (in the words of the well-known philosopher Adela Cortina 1994) and the Social Doctrine of the Church (SDC) serve as the basis for a model in which the company is at the service of the society as a whole; and that, in addition, as Adela Cortina implicitly proposes, the SDC will allow us to enrich that civil ethics in favor of a fairer world. This would be the “ethical construct”; we could thus say, for example, that human beings recognize each other, dignity ([Marina and de la Válgoma 2000](#)), and from there we

can deduce rights such as economic or environmental rights that force companies to be socially responsible and to treat everyone with dignity. However, we can still go further in the hands of the SDC if we remember that there are four fundamental principles according to the “Compendium of the Social Doctrine of the Church”: the dignity of the human person, common good, subsidiarity, and solidarity (PCJP 2005). Indeed, these principles make it much clearer to understand what needs to be achieved (to respect and enhance human dignity; to advance in the common good) and how to achieve it (following the path of subsidiarity and solidarity).

However, there is also the economic construct: it is necessary that at the same time the solution we propose, “business sustainability”, be economically viable. We believe that sustainable companies in financial, social, and environmental matters (as Gómez-Bezares et al. 2016 pose) are going to be equally or more profitable than the rest. This is logical, because such companies will have more loyalty from their workers, their customers, and their suppliers, and they will maintain better relations with their environment, or they will run less risks in adverse situations (Gómez-Bezares 2011).

In this paper we will assume, normally, that companies are financially sustainable, to focus on whether sustainable companies (socially and environmentally) are as or more profitable than the rest, for which there is plenty of empirical support (Badía 2019).

The idea of basing the concept of sustainability on the ethics of different religious traditions has been developed in different works. For example, Hui (2008) bases on Christianity to find an applicable view to faith-based CSR. Butkus and Kolmes (2007), Hill and Capella (2014), Rousseau (2017), or Christie et al. (2019), rely on the SDC, focusing, respectively, on the ecology and environmental issues, the marketing, the natural-resource-based view of the firm, and the integral ecology. Enderle (1997), deals with the corporate environmental responsibility from a Christian perspective. We see there is literature that studies the relationship between Christianity and sustainability (we could also find it in other religious traditions), although there is a bias towards ecological issues. However, to the best of our knowledge, there is an important gap: business sustainability has not been studied from a holistic perspective based on SDC, with the intention of better founding and enriching it. That is what we will do in this job.

In order to achieve this goal, we will review the highest hierarchy texts of the Catholic Church that define the SDC. We will also review quite many studies related to the financial view of sustainability: it is essential that sustainable companies can be equally or more profitable than non-sustainable ones to demonstrate their economic efficiency which translates into a better allocation of resources (key function of the economy). We have already commented on some that go along this line, but it is good to make clear from now on that this is a subject under discussion, as the meta-analyses of Margolis et al. (2009) and Busch and Friede (2018) prove. The former concludes that the relationship between being sustainable and financial performance is small, but positive; the latter, a second-order meta-analysis, reaches to a clear and positive relationship; but both are aware that the issue is controversial. Consequently, we will study it and will also do our own contrast, using a simple, original methodology, and where we apply a novel index: the PIRR (Penalized Internal Rate of Return). Indeed, we will compare the financial performance of the ESG (Environmental, Social, and Government) indices with that of their conventional versions. We will use four indices to measure financial performance on ten stock indices, with a simple statistical apparatus that will prove, without a doubt, the economic efficiency of sustainability.

Sustainability is also increasingly important for investors (see e.g., Spainsif 2020 or Eurosif 2020). As we have just mentioned, sustainability is frequently analyzed based on ESG dimensions (Capelle-Blancard and Petit 2019), and it is always important to identify the different stakeholders of the company (Hörisch et al. 2014), among which the different types of investors will be (e.g., Badía et al. 2020, analyze SRI portfolios adopting a retail investor’s perspective). Negative screening methodologies to define sustainable companies are frequently used to build SRI portfolios, many of them with religious origin (Guay

et al. 2004; Arribas et al. 2019a). Different indicators can also be valued and weighted in a positive way (García-Melón et al. 2016; Lamata et al. 2018). All of these criteria have been frequently criticized for different reasons, ranging from subjectivity to lack of credibility (Windolph 2011; Baccaro and Mele 2011; Gangi and Varrone 2018). Our paper will help to establish and better understand what sustainability is and, consequently, it will also be useful for SRI investors.

We end this subsection quoting the recent bibliometric study by Bui et al. (2020) that, when looking for the fields that should be more studied within business sustainability, understand that a better and more complete ethical foundation is necessary and recognize among the “sustainable corporate finance knowledge gaps: (1) corporate finance in sustainability” (p. 1). Precisely, we dedicate this paper to these issues.

1.2. Research Question and Hypotheses Formulation

The research question we want to answer can be formulated as follows: “Does business sustainability have an ethical and economic logic?” and specifically, “Can it be based on and enriched by the SDC?” and “Does it have an economic foundation that we can empirically corroborate?”

Thus, based on all of the above, the two hypotheses we want to confirm will be:

1. Business sustainability can be grounded and enriched based on the corpus of the Social Doctrine of the Catholic Church.
2. Business sustainability has a clear economic logic, which can also be empirically confirmed.

In other words, sustainable companies can be, and actually are, equally or more profitable than the rest, creating value for shareholders and for society.

We will advance, following, the main conclusions we have reached in this research:

1. We have based the concept of sustainability from an ethical perspective, focusing mainly on the SDC. We have also been able to enrich the concept of sustainability based on the principles and values of the SDC, thus confirming the first hypothesis.
2. We have developed the economic bases of sustainability, also reviewing some empirical contrasts that study this problem, and that mostly confirm that sustainable companies surpass from an economic point of view those that are not sustainable. We have also made our own empirical contrast concluding that sustainable companies have equal or greater financial performance than non-sustainable ones, which corroborates their economic logic and confirms our second hypothesis.

As an additional conclusion, we will see that the business sustainability model, as we have stated it, can overcome two major problems of the stakeholder model: the possible lack of motivation of those who make decisions to benefit everyone affected and the agency problems, by maintaining the objective of maximizing value and making it coincide with the CSR.

The rest of the paper will be developed as follows: in Section 2 we will study the SDC as the foundation of sustainability; in Section 3 we will analyze the concept of sustainability in general and, especially, business sustainability in particular; in Section 4 we will make our empirical contrast and in Section 5 we will share our conclusions.

2. The Social Doctrine of the Catholic Church

The Catholic Church does not advocate for a theoretical economic model, nor does it propose a collection of technical solutions (it can be seen how John Paul II (1991) recognizes it in its encyclical *Centesimus Annus* no. 43 or Benedict XVI (2009) in *Caritas in Veritate* no. 9). What it has indeed developed is the Social Doctrine of the Church (SDC), exposed in a wide set of documents issued by the ecclesial magisterium (you can see PCJP (2005) where the SDC is summarized).

This social doctrine is a rich source of wisdom, impossible to summarize here, but we will look at some points taken from the encyclical *Centesimus Annus*. It tells us that the

free market, despite it has its limitations, turns out to be an effective instrument for the allocation of resources (no. 34 and 42), while it is pointed out that profits indicate the good progress of a company (no. 35); recognizing, in any case, as we said before, that the Church does not have an economic model to propose (no. 43). It also deals with the “role of the State in the economic sector” and the “Welfare State” (no. 48) and affirms the “preferential option for the poor” (no. 57). Subjects such as solidarity, subsidiarity, the common good or human dignity frequently appear in the encyclical, so, for example, in the face of economic globalization, it observes that, “this increasing internationalization of the economy ought to be accompanied by effective international agencies which will oversee and direct the economy to the common good” (no. 58).

The company’s attention to the different stakeholders, fulfilling not only the objectives of the shareholders, but also those of the rest involved, as employees, customers, suppliers, creditors, society in general . . . has given rise to the stakeholder theory, which is close to the concept of sustainability. Retolaza et al. (2019) propose to base and clarify this theory based on the SDC and its ethical and anthropological approach. The principles that these authors highlight of the SDC and that will be perfectly useful to support and enrich the concept of sustainability are summarized in the following textual quotation (p. 2):

“According to the Compendium of the Social Doctrine of the Church (CSDC), Catholic Social Thought can be synthesized around four interrelated principles (with other two attached principles): human dignity (human beings being created at the image of God) (CSDC 108), the common good (in relation with the principle of universal destination of goods), subsidiarity (linked with the principle of participation), and solidarity.” (PCJP 2005)

These principles can be analyzed in detail in the “Compendium of the Social Doctrine of the Church”, which also indicates the values (inherent to the dignity of the human person) that are truth, freedom, justice and love (PCJP 2005, no. 197, and for all the above see no. 160 to no. 208). In addition, the SDC is based on an anthropological conception that Retolaza et al. (2019, p. 3) summarize as follows:

“The role of the firm in economic activity according to Catholic Social Thought is based also in a conception of the human being (anthropology) that recognizes the individuality of each person (an individual with his/her own interests to follow, in competition with others) and the relational dimension of the very same person (an individual with shared goals, able to work in cooperation and solidarity with others) . . . ”

The Catholic Church does raise a set of objectives for the economic system: sufficient levels of welfare for the population as a whole, fair distribution of wealth, respect for the dignity of people . . . ; the Catholic Church understands that this must be achieved under the principles of solidarity and subsidiarity; and maintains a certain anthropological conception, which recognizes the freedom of human beings and their ability to cooperate. It should be the economic science the one that seeks models that combine efficiency in the allocation of resources and respect the aspirations of all people in the line of the SDC. This research aims to justify that in this endeavor the business sustainability construct can contribute a lot.

In the following points we will deal with the role of the State, we will make a first approximation to the concept of sustainability, and we will link it with the SDC.

2.1. On the Role of the State

Already in the nineteenth century, Leo XIII (1891), in *Rerum Novarum*, speaks of the duty of the rulers to alleviate the workers’ situation (no. 32); and in no. 37 it literally reads:

“Rights must be religiously respected wherever they exist, and it is the duty of the public authority to prevent and to punish injury, and to protect every one in the possession of his own. Still, when there is question of defending the rights of individuals, the poor and badly off have a claim to especial consideration. The

richer class have many ways of shielding themselves, and stand less in need of help from the State; whereas the mass of the poor have no resources of their own to fall back upon, and must chiefly depend upon the assistance of the State. And it is for this reason that wage-earners, since they mostly belong in the mass of the needy, should be specially cared for and protected by the government.”

We understand that the request of Leo XIII is clear, asking the State to look especially for the interests of the most disadvantaged; this “preferential option” has been a constant in the Church since the Gospel of Jesus.

In the “Compendium of the Social Doctrine of the Church” (PCJP 2005, no. 351 to no. 355) the State’s action is discussed, insisting on the principles of solidarity and subsidiarity. In addition, it understands that the State must provide the legal framework, harmonize and complement the market, redistribute income, promote the common good or achieve “public financing that is itself capable of becoming an instrument of development and solidarity” (no. 355). John Paul II (1991) in *Centesimus Annus* (no. 48) insists that the State must establish the legal framework, strengthen the security of companies and individuals, ensure legality, commit to human rights, by encouraging development, by stimulating competition . . . and also by acting when private activity does not arrive, in accordance with the principle of subsidiarity; it also talks about the “Welfare State” and its possibilities and limitations.

In essence, the SDC advocates for a State that, in accordance with the principle of subsidiarity, completes and facilitates the activity of the private initiative; while providing an adequate framework for healthy competition, guiding development and establishing redistribution systems.

Accepting this framework, in this work, we will focus more on the activity of companies that, strengthening their responsibility and sustainability, will advance in the principles and values of the SDC, in perfect congruence with the principle of subsidiarity: companies will work in this line, leaving the role of last guarantor to the State, where the private initiative does not arrive.

To finish this point, we have to consider the international framework. John Paul II (1991) in *Centesimus Annus* (no. 58), observes that the common good must be conceived with reference to the whole human family and that the “globalization of the economy [. . .] can create unusual opportunities for greater prosperity”, while requesting guidance and control from international institutions. Further, Benedict XVI (2009) in *Caritas in Veritate*, refers to these topics, as well as it does the “Compendium of the Social Doctrine of the Church” (PCJP 2005). There is a clear awareness that there are issues that we must address from an international perspective, and that this should always be done respecting the principles of subsidiarity and solidarity, seeking the common good and respecting the dignity of the human person.

It will be within the framework of all the above where companies must work for their economic, social, and environmental sustainability.

2.2. A First Approach to the Concept of Sustainability

Thirty years ago, as we will see later, we started to talk about sustainable development (United Nations 1987); we have also been talking about Corporate Social Responsibility (CSR) for many years, to refer to socially responsible companies with the environment, internally and externally: the so-called stakeholders. In the same line it is talked about sustainable companies, although in our opinion, if we talk about sustainable companies, we must add that they must also be economically sustainable. In addition, the concept of sustainability is often associated, as a priority, with environmental sustainability. (We can thus see that the first meaning of the Cambridge Dictionary 2020 of sustainability is: “the quality of being able to continue over a period of time”, and the second: “the quality of causing little or no damage to the environment and therefore able to continue for a long time”.)

The increase in productivity is a necessary, but not sufficient, condition for social economic progress, in addition it is necessary that the value created is distributed in a balanced manner and that the social benefits are greater than the costs, as Grifell-Tatjé et al. (2018) affirm; Sen (2000) can also be seen. Accepting that public policies are a good instrument in order to translate the value created by the increase in productivity into social value, companies can also play an important role here (Grifell-Tatjé et al. 2018; Gómez-Bezares and Gómez-Bezares 2019). This position is what gives rise to the development of CSR or corporate sustainability. Thus, the responsible companies will take more care of their workers and other stakeholders, including their respect for the environment and the rights of future generations.

We will understand that a company is “sustainable” when it is from a financial, social and environmental point of view, in the line of Gómez-Bezares et al. (2016); that is, it develops itself at a sustainable pace from a financial point of view, and fulfills its social and environmental responsibilities. We believe that this approach is not only compatible with the SDC, but also may have many matching objectives. On the other hand, sustainability can be grounded and enriched from the SDC itself.

Sustainable companies must be more profitable in the long-term if we want to match ethical and economic objectives, or at least not less profitable. There are studies that theoretically and empirically justify this hypothesis (Gómez-Bezares et al. 2016; BEE 2018; Badía 2019). We will review and contribute to these ideas later, and we will compare the performance of conventional stock indices to that of the indices composed by sustainable companies. If the latter are not worse than the former, the sustainability model would also be justified from the economic logic.

According to Eurosif (2020), “Sustainable and responsible investment [. . .] combines fundamental analysis and engagement with an evaluation of ESG factors in order to better capture long-term returns for investors, and to benefit society by influencing the behavior of companies”. ESG factors refer to the company’s performance in the Environmental, Social and Governance aspects.

In what follows we will understand by sustainable the companies that respect and care for the society that surrounds them, for the rights of all the stakeholders, which obviously include the rights of future generations and respect for the environment as summarized by Pope Francis (2015) in the encyclical *Laudato Si’*.

2.3. Social Doctrine of the Church and Sustainability

This subsection is, in our opinion, central to this paper. As we mentioned above, and following Retolaza et al. (2019), the “Compendium of the Social Doctrine of the Church”, highlights four interrelated principles and two complementary principles (PCJP 2005, no. 160 to no. 208; see Table 1). The values are also indicated: truth, freedom, justice, and love (PCJP 2005, no. 197; see Table 2), and all this is based on an anthropological conception (Retolaza et al. 2019; see Table 3).

Table 1. Principles of the SDC.

| Principles | Human Dignity | Common Good | Subsidiarity | Solidarity |
|--------------------------|---------------|--------------------------------|---------------|------------|
| Complementary Principles | | Universal Destination of Goods | Participation | |

Table 2. Values of the SDC.

| Values | Truth | Freedom | Justice | Love |
|--------|-------|---------|---------|------|
|--------|-------|---------|---------|------|

Table 3. Anthropology of the SDC.

| | | |
|---|---|---|
| The individuality of each person; with his or her own interests to achieve, in competition with others. | It is necessary to look for the balance between ↔ | The relational nature of the human person allows him or her to share objectives, cooperate with others and show solidarity. |
|---|---|---|

From the ideas from Tables 1–3, we can reasonably justify sustainability from an ethical and anthropological point of view and seek the legitimacy of the different actors. Indeed, human beings seek their own interests, and this leads to competition, which is good to encourage them to overcome themselves, achieving their own welfare and that of the community (this is the foundation of the market system: Adam Smith’s invisible hand); but they are also able to cooperate, forming very varied communities, from neighborhood associations to states, and especially in our case companies; then our anthropological foundation takes us to individuals and companies that compete (and also collaborate) with each other seeking for individual and collective welfare. Sustainable companies try to do this by promoting fundamental principles of the SDC such as the dignity of the human person (PCJP 2005, no. 108) and the common good (PCJP 2005, no. 164 et seq.). This justifies respect for the rights of the whole and of each of the stakeholders, who are entitled to demand them because their dignity, according to the SDC, comes from having been created in the image of God “the human person is a creature of God [. . .] «God created man in his own image, in the image of God he created him; male and female he created them» (Gen 1:27)” (PCJP 2005, no. 108; Catechism of the Catholic Church, John Paul II 1997, no. 357).

The next two principles are subsidiarity (PCJP 2005, no. 185 et seq.) and solidarity (PCJP 2005, no. 192 et seq.). We believe that the principle of solidarity is sufficiently clear and accepted by the whole of our society; it is the *fraternité* of the French Revolution that comes from Christian charity, from love (Catechism of the Catholic Church, John Paul II 1997, no. 1822 et seq.) and is reflected in the well-known parable of the Good Samaritan. Sustainability needs solidarity with those who in certain circumstances need help, and we have a duty to grant it to maintain or regain their dignity as persons (“which is the foundation of all the other principles and content of the Church’s social doctrine”; PCJP 2005, no. 160; you can also see the encyclical *Mater et Magistra*, John XXIII 1961, no. 220).

Subsidiarity is, perhaps, one of the most original and characteristic ideas of the SDC. The other three principles discussed above are accepted, at least formally, by today’s society; but this is not so clear with subsidiarity: some want to transfer to the State functions that may well be developed at lower levels (such is the case of choosing the education model for children, where families should have a fundamental role, or the multiple interferences in individual freedom); similar is the case of centralizing policies that occur so frequently in political communities or in companies, which reputed economists such as Hayek (1945) or Jensen and Meckling (1995) have long time ago rejected as ineffective. The Catholic Church bases its commitment to subsidiarity in ethics as Pius XI (1931) reminded us in *Quadragesimo Anno* (no. 79): “Just as it is gravely wrong to take from individuals what they can accomplish by their own initiative and industry and give it to the community, so also it is an injustice and at the same time a grave evil and disturbance of right order to assign to a greater and higher association what lesser and subordinate organizations can do” (which John XXIII 1961, no. 53, replicates).

Subsidiarity is at the basis of the idea of sustainable enterprise. We have already commented above that the intervention of the State (and other lower and higher authorities) is convenient and necessary on numerous occasions; but according to the SDC we must do this under the principle of subsidiarity. There are interventions by the State that are unavoidable (at least in our current world) such as some of those mentioned above, but others will be less necessary the more ethical the behavior of economic agents be. We are in favor of the State (and the rest of the authorities) setting the rules and supervising their compliance, but in accordance with the principle of subsidiarity it is good that the

lower groups and the companies themselves do everything possible to advance in the flourishing of the dignity of the human person and in the conquest of the common good; this frees the State from part of the already heavy burden that falls on it, empowers the lower groups against the upper ones, is more economically rational (Hayek 1945; Jensen and Meckling 1995) and, above all, is more valuable ethically (Pius XI 1931). The idea of business sustainability proposes, precisely, to move forward in this line: that companies take care of the interests of all stakeholders, also of the environment and of the rights of future generations (Francis 2015), while being interested in its profitability (John Paul II 1991, no. 35), which demonstrates its economic efficiency; in this way they make the economy progress towards the common good, advancing in the dignification of human beings. Such a form of action is not only consistent, but easily deduced from the principle of subsidiarity.

These four principles (PCJP 2005, no. 160) are complemented by two others (Table 1): the universal destination of goods (related to the common good; PCJP 2005, no. 171 et seq.) and the principle of participation (consequence of subsidiarity; PCJP 2005, no. 189 et seq.). These two principles also serve to justify and enrich the concept of sustainability. Sustainability implies reasonable equality among human beings (Gómez-Bezares et al. 2019), as we are asked in *Gaudium et Spes*: “God intended the earth with everything contained in it for the use of all human beings and peoples. Thus, under the leadership of justice and in the company of charity, created goods should be in abundance for all in like manner” (Second Vatican Council 1965, no. 69). Regarding participation, this principle should serve to enrich the concept of governance: a government that cares about the interests of all those involved and in which they can make their voices heard and defend their interests; and this not only at the level of political community, but, especially in this paper, at the company level. There is an important task ahead to reconcile the authority necessary for the operation of a business organization, the essential hierarchy in decision making, with the fair and enriching participation of those involved; but in our opinion, that participation, in the light of the SDC, is consubstantial to the concept of sustainability.

We must also talk about the values of the SDC (PCJP 2005, no. 197 et seq.: Table 2). Thus, the truth can contribute a lot in a sustainable company, such is the case of transparency, so necessary in today’s economic world. In addition, transparent companies will reduce the controlling work of the State, which is consistent with the principle of subsidiarity. The value of freedom can be applied in many different ways. As stated in *Gaudium et Spes*: “persons and societies thirst for a full and free life worthy of man” (Second Vatican Council 1965, no. 9), “man was made an intelligent and free member of society by God Who created him” (no. 21); from here we deduce that human beings should be able to exercise economic freedom, as proposed by the market economy, and participate freely in companies, which is perfectly consistent with the idea of sustainability. Precisely the sustainability starts from the mandate (United Nations 1987) to meet the needs of present and future generations: we cannot be free if we cannot satisfy our basic needs.

The value of justice is inherent to the concept of sustainability (we seek a fairer world for the people who inhabit the planet today and for its foreseeable future inhabitants). Finally, love is the key to the Gospel of Jesus: “love one another as I have loved you”; undoubtedly, this sublime idea transcends the concept of sustainability, but at the same time it can be very useful to enlighten the way: love of neighbor can help us move forward in responsible and sustainable economy and companies.

Following with the relationship between SDC and sustainability, we find the seminal concept of “integral human development” (Paul VI 1967; Benedict XVI 2009). Integral human development leads to human dignity and the common good, educates in solidarity and subsidiarity, promotes freedom and pursues justice. Sustainable companies are a way to achieve this integral human development, within a society that is committed to it. This path requires people formed integrally to seek the truth and grow in love.

People, companies and society are entitled to seek their own objectives; we believe that in business sustainability we can find a reasonable balance in the short-term and a common benefit in the long-term. Thus, the company makes a contribution to the development

of people and society: it produces goods and services for the community, dignifies the people who work in it, gives opportunities to other stakeholders. In fact, it is enabling the development of human beings in this anthropological tension between competing and collaborating, which not for being difficult should be considered less desirable, by adding stimulation and solidarity.

In addition, if we want to achieve a positive development for the human being, we must remember his or her relational nature: we need each other for our development as human beings (Francis 2015, no. 70 and no. 240). A sustainable company must be a community that takes care of these aspects.

The current globalized economy, as it was said before, needs some form of world authority (Benedict XVI 2009, no. 57 and no. 67). However, since this is being implemented very slowly, companies can design complex mechanisms to avoid taxes, take advantage to worsen the working conditions for their workers, avoid control of State or supra-state authorities, defraud their clients ... (Benedict XVI 2009, no. 25). This situation leaves ethical behavior, many times, within company's responsibility, feeling responsible for participants from different countries. This must also be considered in the concept of sustainability.

The ethical and anthropological foundation of the concept of sustainability is confusing; it could not be otherwise in our society, where there is great disparity in ethical issues (MacIntyre 2007). However, the SDC gives us an ethical and anthropological foundation that allows us to sustain and enrich the concept of sustainability; such a foundation is easy to assume from Christianity, and it does not seem difficult to accept for any person of good will, even if he or she does not share the ultimate foundations (such as creation in the image of God).

To conclude this subsection, we want to raise two ideas of Pope Francis, which sustainability must take into account: it is not permissible that so many people remain practically outside the economic system (Francis 2013, no. 53), and we cannot forget that private property is at the service of the common good (Francis 2015, no. 93).

2.4. As an Epilogue of Section 2

From the previous pages of this section it is easy to gather that the Social Doctrine of the Church is compatible with business sustainability; in addition, based on the SDC we can ground it, enrich it and make it grow. The SDC is a true collection of wisdom, an intellectual heritage offered to all, that must challenge us to advance in the construction of a better world. In addition, an important part of this doctrine can be convincing for believers and non-believers of good will.

The idea of a sustainable company, which seeks its profitability while simultaneously respecting the rights of the stakeholders, is the business model that we want to strengthen; when competing to find its profitability, it strives for the efficient use of resources and to satisfy the needs of society.

We believe that this business model will be more profitable in the long-term, will be more legitimized, will be more innovative and will encourage the adherence and support of its stakeholders, starting by the most direct ones: managers, workers, and shareholders. It may happen that in the short-term things be more complicated if competition applies cuts in costs or quality that the sustainable company cannot assume; but the reasonable thing is that in the long-term the sustainable approach will prevail.

We have an obligation to achieve sustainable development; but we also believe that it is the best thing to do. We must be creative, innovative, visionary, to reach a world whose economy can grow without self-destruction; we need another development model (Francis 2015, no. 191).

In addition, the Church also asks for other logics, thus Benedict XVI (2009) in *Caritas in Veritate* (no. 36) explains: "the principle of gratuitousness and the logic of gift as an expression of fraternity can and must find their place within normal economic activity". It is possible and desirable that the logic of giving without counterpart be practiced, and

that is the way of acting of many religious and lay organizations (no. 37). Solidarity, gratuity, gift, help the recipient and lead to the flourishing of the person who gives.

3. Sustainability

As we have commented previously, for the [Cambridge Dictionary](#) (2020) sustainability is: “the quality of being able to continue over a period of time”. This is also our idea; let us see some background.

In 1972 the first report of the Club of Rome was published: “The Limits to Growth” ([Meadows 1972](#), dir.) where it is explained that unlimited economic and population growth is not possible on our planet. The environment, limited natural resources . . . limit growth, at least as we now conceive it. The [Club of Rome](#) (2020) has continued working on these issues.

It is true that this reminds us of Malthusianism (Thomas Robert Malthus argued at the end of the 18th century that the population increased in geometric progression while food did so in arithmetic progression, which would lead to collapse). Technological advances, new discoveries . . . make us think that humanity can continue to grow, but it seems obvious that there is a limit and that this limit is approaching.

Companies must be socially sustainable: a company that is poorly valued in the social issues because it maintains poor working conditions for its workers, does not respond to its customers’ claims or pays badly, will not be able to obtain high long-term returns if it does not change its attitude. Throughout the twentieth century there have been numerous authors who have supported CSR, such as our Professor Antonio [Freije](#) (1981).

In 1987 a commission chaired by Dr. Gro Harlem Brundtland (then Prime Minister of Norway) prepared a report for United Nations where the concept of sustainable development appeared. According to the Brundtland report, sustainability lies in satisfying the needs of the present generation without compromising the possibilities of future generations to meet their own needs ([United Nations 1987](#)).

Today there is a high social consensus on the need to achieve a sustainable development mode (UN Sustainable Development Goals, [United Nations 2020](#)); it is very important that we take care of the planet, but also of the millions of human beings who inhabit it. Pope [Francis](#) (2015) in the encyclical *Laudato Si’* maintains this idea. At the same time, the strong migratory flows towards Europe and the USA show that the current distribution of income and welfare is not sustainable: human beings enslaved by poverty migrate from Africa or Latin America because many do not resign themselves to their fate ([Murrugarra et al. 2011](#)). An interconnected world thanks to ICTs makes it increasingly difficult to ignore the high number of poor on Earth.

If, due to economic and population growth, we consume natural resources, degrade the environment or cause climate change that makes large areas of the Earth sterile, we will dangerously compromise the future of humanity; these are actions that cannot be maintained over time, they are not sustainable. Nor are sustainable the huge differences in income or access to basic goods and services that occur in our world of the 21st century, because if they remain, we will force the most disadvantaged to emigrate to the richest countries, we will push them into terrorism.

To justify, from an ethical point of view, the importance of sustainability, we can rely on human rights or the Social Doctrine of the Church—SDC—(which we talked about in Section 2): the dignity of present and coming human beings is enough support to justify their rights ([Marina and de la Válgoma 2000](#); [PCJP 2005](#)), then we will have to promote sustainable actions, which are those that can preserve and improve the exercise of the aforementioned rights; and remember that men and women are the most important ([Francis 2015](#)).

The concept of sustainability supported by human rights, by the Club of Rome, by the Brundtland report, by the SDC, is a fundamental element in the concept we have today of economic development; its basic idea: respect for the rights of present and future generations for a commitment to justice, we believe that it will last over time.

After this more general vision, we will focus on business sustainability, to which we mainly dedicate this research, and on its ethical and economic foundation.

3.1. Business Sustainability

We will understand as sustainable company that one which adequately deals with its responsibilities to society (including generations to come). We can also call them socially responsible companies, companies with ESG criteria. As we have already mentioned, sustainable companies can be as profitable or more than non-sustainable ones ([Eccles et al. 2014](#); [Gómez-Bezares et al. 2016](#); [Ferrell et al. 2016](#); [Miralles-Quirós et al. 2017](#); [Miralles-Quirós et al. 2018](#); [BEE 2018](#)). In this subsection we want to briefly touch three points: its ethical foundation, its business foundation and the empirical reality.

From an ethical point of view, sustainable companies can be based on civic ethics ([Cortina 1994](#)). Indeed, sustainable companies would be those that respect the three generations of human rights:

- First generation: civil and political rights.
- Second generation: economic, social and cultural rights.
- Third generation: environmental rights and the right to peace.

Obviously, the State must guarantee these rights for a sense of justice, but it will not be able to regulate and control everything and there comes the concept of sustainability: sustainable companies will work to preserve these rights in their field of action.

The ethics expert, Adela [Cortina \(2015\)](#), often repeats a sentence that we consider very fortunate: “Social responsibility should be an instrument of management, a measure of prudence and a demand for justice”.

On the other hand, it has become clear in the second section that we can support sustainability by the SDC. The Social Doctrine of the Church has been intensely concerned with human dignity, the rights and aspirations of workers, the responsibility of the company with society, natural resources and future generations, the environment, and the common good. We believe that it is not necessary to insist that sustainability can be based very well on the SDC. However, we can also enrich, based on the SDC, the concept of sustainability, as some aspects that we developed in the second section are not yet sufficiently contemplated in the idea of sustainability, such as solidarity, participation or salary balance. These are challenges that the SDC poses to economists, as they have a clear support in the SDC, contribute to the concept of sustainability and are not yet sufficiently valued in the sustainability rankings.

Solidarity and participation are two aspects that make the company more valuable for society and for its workers, and well-articulated will help to create long-term value, the challenge is to introduce them into the daily operation of the company. A solidarity that does not end in philanthropy: it would be the case of the company that prefers not to fire its workers, giving itself a deadline to see if the market goes back; or extends the payment deadlines to a client hoping that his or her liquidity problems are solved; or accepts an important return from a customer that is saturated with product; these actions are not uncommon in companies (we have heard of them), and they have a lot to do with long-term relationships. They are made for solidarity, but at the same time they form a way of behavior for the company; if applied moderately they can create long-term value.

The participation of all employees in the management of the company seems a complicated issue, it is difficult to escape from two extremes: either this participation may be simply formal or, at the other end, the decision-making process may become inefficient. However, workers who participate feel empowered and, without a doubt, bring knowledge to the company. We could also talk about the participation of the rest of the stakeholders. It is a challenge for economists to articulate all this to create long-term value; it is an idea developed in the SDC, perfectly acceptable within the concept of sustainability, and that correctly designing the channels and models of participation, seems very reasonable to serve to create long-term value.

A topic that seems very important to us when talking about sustainability is the salary balance (Gómez-Bezares et al. 2019). Some salary differences are inherent to the market system: they stimulate to obtain a better yield, they encourage to acquire more knowledge and skills, they guide the allocation of resources taking the most valuable ones where they are most needed. On the other hand, the SDC makes clear that there must be reasonable equality among human beings (Second Vatican Council 1965, no. 69) or the importance of the universal destination of goods (Francis 2015, no. 93). We must find a balance between stimulating and motivating differences, which seem necessary, and outrageous differences due to their enormous magnitude. It is not sustainable nor consistent with the SDC, for being humiliating and contrary to human dignity, that in one company a person earns a thousand times more than another, no matter how valuable his or her work is. More than forty years ago Peter Drucker (1977) spoke of a range of one to twenty-five, which today seems reasonable to us.

In Gómez-Bezares (2011) some ideas are reviewed on how the care of the stakeholders attending to their fair aspirations can have positive effects on the profitability of the company in the long-term. In an economy where knowledge is important, satisfied, and motivated employees are essential for the smooth running of the company (Edmans 2011; Wang et al. 2020); as the intellectual level and the need for innovation increase, the more important is the motivation and less effective is the control of the workers. It is also necessary to increase the spirit of collaboration with suppliers and customers, with public administrations; even, sometimes, with the competition: to open new markets together or to face common problems (e.g., Riojawine 2020). Satisfied stakeholders are consubstantial with sustainability and, in addition, in today's economy, an undoubted source of opportunities (Zhang et al. 2020).

The company must behave correctly, respecting the rights of all stakeholders, otherwise it would not be sustainable; however, in addition, acting like this, it can create more long-term value, which makes converge the ethical and economic logic: "doing well by doing good" (Liang and Renneboog 2017). In finance, the company's objective has been defined as maximizing its value (Ferrell et al. 2016); if we understand it as creating long-term value, which is how it should be understood, it seems very reasonable that sustainable companies create more value than the rest (Eccles et al. 2014).

Moreover, in a complex and globalized world it is difficult for regulation and supervision to cover everything. It is good that the State and supranational entities do their work of regulation and supervision, but there is ample room for self-regulation, which is also very consistent with the principle of subsidiarity. Self-regulation goes hand in hand with transparency, which we already talked about in the second section; we must demand transparency from companies so that society can verify the content and scope of self-regulation. In addition, if this works well, we have a valuable instrument to match the objective of value creation with the social objectives appreciated by the stakeholders: if a company pollutes, uses child labor, discriminates by sex or race, has a high level of litigation with its clients or carries out important tax avoidances; however, if this is known, its clients will not feel comfortable acquiring its goods and services, its workers will not be comfortable, and in general the society will censor it and act accordingly; it is the moral control by the markets (Gómez-Bezares 2011).

Many studies (Kotsantonis et al. 2016) have explained that responsible companies achieve energy savings, are more prone to innovations or develop a higher level management, which can lead to greater long-term value.

There is abundant empirical evidence showing that responsible companies achieve better financial performance than those that are not (Eccles et al. 2014; Gómez-Bezares et al. 2016; Ferrell et al. 2016; Lins et al. 2017; BEE 2018; Albuquerque et al. 2019). Man (2017) analyzes numerous researches on the subject, examines the reasons for this greater performance, and exposes very varied empirical results, seeing that there is a positive relationship between social performance and financial performance. Kotsantonis et al. (2016) are in the same line, qualifying that are interesting for value creation those actions that focus on social and

environmental aspects that are relevant for the specific industry. There are also empirical results where there is no relationship between social responsibility and financial results, or where this relationship is negative (as also explained in the previous works), but we believe that the predominant tendency is to appreciate a positive relationship, or, at most, a nonrelation (Badía 2019).

3.2. Business Sustainability: Instrument of Management and Measure of Prudence

Returning to the idea of Adela Cortina (2015), in the light of civic ethics and the SDC, social responsibility, which we encompass in the concept of sustainability, is a “demand for justice”, but it is also “a measure of prudence”. Indeed, it is expected that sustainable companies are less exposed to major reputational crises (such as those that can be caused by corruption scandals, frauds, or mishaps with serious environmental effects), better support economic crises because of their better relations with the external and internal environment or are more resilient to unexpected adverse events (natural catastrophes, breakdowns, etc.) as they are able to rely on a dense network of affections and complicities. All this reduces their risks and allows them to better resist adversities (Gómez-Bezares et al. 2016; Albuquerque et al. 2019).

However, we will focus here more on the value of sustainability as a management tool. Let us start from the definition of the financial objective of the company as maximizing its value and raising this with a long-term perspective: sustainable companies, as we defend in this paper, keep this objective firm, which they try to achieve through appropriate management techniques, among which they include the respect for the rights of all stakeholders, present and coming, or the maintenance of adequate financial balances. A long-term vision almost naturally leads us to act like this, but if the doubt arises, the ethical substrate of the sustainable enterprise that we have developed must prevent its responsables from undermining human dignity and its consequent rights.

An important challenge for sustainable companies is undoubtedly to provide themselves with an adequate governance system. This is not the time to go in detail into this issue, but good governance is a very important help to avoid scandals, balance, and align interests and achieve a fair distribution of what the company generates. Above all this it glides the agency problem. Jensen and Meckling (1976), in a classic work of financial literature, already raised the problem and pointed out possible solutions. Business managers should act as “loyal agents” of the owners; who, for being many and very atomized (as happens in many large companies), and lacking the information and the suitable formation, delegate to the managers the decision making; the problem then appears when those managers put their own interests ahead of those of the owners. This problem lurks in all business organizations where the owner does not make the decisions, but it worsens the more the distance is between the decision makers and the shareholders. Government systems must achieve alignment between the interests of managers and owners.

Stakeholder theory, by trying to create value for all social participants, leaves, in our opinion, an excessively open field for managers’ decisions and can aggravate the agency problem (Retolaza et al. 2019). That is why we believe that sustainability, while maintaining the financial objective of maximizing long-term value, with limitations (such as not undermining human dignity), is a clear guide that facilitates the correct allocation of resources and alleviates the agency problem (Ferrell et al. 2016), proposing ways for its possible solution: managers must aim to maximize the value of the company in the long-term, and they must be evaluated for this; although, simultaneously, they must be aware that value creation is clearly linked to stakeholders satisfaction and that, in addition, there are red lines that cannot be overstepped like the dignity of the people as proposed by the SDC. The affirmation of the financial objective, as we have been conceptualizing it, allows the design of incentive and control models throughout the entire organization, consistent with the objective and its limitations. We will thus develop complementary motivational systems: we believe that the main motivation for the agents must be to do things well, promoting the welfare and dignity of people, but human beings are also stimulated by close motivations (a profes-

sional promotion, an economic incentive, congratulations, avoidance of a reprimand, and etc.); what must be achieved is that sustainability, financial objective and motivation be as aligned as possible, shaping the culture of the sustainable company, and for this the SDC can be an enriching support.

4. The Financial Performance

Sustainable companies must be profitable, otherwise they would not be financially viable. There are institutions, like many NGOs, which do not seek financial profitability, but that is not what we are talking about in this work; here, we refer to companies that do seek profit, and that are necessary for the creation of wealth within our economic system.

Let us keep in mind that business profitability is an indicator of its ability to correctly allocate resources and, consequently, of its achievements in wealth creation, so we must not neglect purely economic aspects: not only is economic viability for the interest of shareholders defended here, but also for the interest of the society as a whole.

It is important, therefore, that sustainable enterprises be profitable; and we will go one step further: socially and environmentally sustainable companies should be at least as profitable as the least responsible ones in those matters; otherwise, their dedication to improve the social and environmental impacts of the company would be at the cost of lower economic efficiency. If we find that they are at least as profitable, we will have answered a part of our research question, finding that business sustainability has economic logic. This is in line with the second hypothesis that we wanted to confirm in our work: “business sustainability has a clear economic logic, which can also be empirically confirmed.”

We have already commented in the previous section of this paper the reasons that make it possible to hypothesize the foreseeable economic success of socially and environmentally sustainable companies, as well as we have seen some references that support this hypothesis empirically. What we are going to do now is to check it ourselves based on a clear and simple contrast: we will take a series of national and international indices, and compare the financial performance of sustainable indices with that of conventional indices, if we do not appreciate differences, or these are in favor of sustainable indices, the economic logic of the model will be corroborated; we will see that socially and environmentally sustainable companies are at least as financially interesting as non-sustainable ones. We will begin, therefore, explaining the financial concept of performance, then we will select the indices and end up making the empirical contrast, seeing what we can deduce from it.

4.1. Performance and Its Measurement

From a financial point of view, and from a stock market perspective, the important thing is the return of a security or of a security portfolio; we could thus associate performance with return, at least as a first approximation. However, for many years finance has taught us that in addition to return, risk is also important (Modigliani and Modigliani 1997). Between two investments of equal return and different risk, we will choose the one that gives us the lowest risk; we are risk-averse investors. This is how performance indices were born, to put return in relation to risk when assessing the interest of an investment. We are going to work with four indices; calling μ to the average return in a period, σ to the standard deviation of the returns in that period, r_0 to the return of the risk-free asset, β to the systematic risk, μ^* to the average return of the market index and σ^* to its standard deviation, we will have:

Sharpe (1966) Index

$$S = \frac{\mu - r_0}{\sigma}$$

Its ranking coincides with M^2 of Modigliani and Modigliani (1997).

Treynor (1965) Index

$$T = \frac{\mu - r_0}{\beta}$$

Its ranking coincides with M^2 for beta of Modigliani (1997).

Jensen (1968, 1969) Index

$$J = (\mu - r_0) - (\mu^* - r_0)\beta$$

Known as Jensen's α .

PIRR Index

$$PIRR = \mu - \left(\frac{\mu^* - r_0}{\sigma^*} \right) \sigma$$

Penalized Internal Rate of Return (Gómez-Bezares and Gómez-Bezares 2015).

These are the four indices that we are going to handle in our empirical contrast. In two of them the risk (measured by σ or by β) penalizes the average return (μ) acting as a denominator in a quotient (Sharpe and Treynor). It is what is called the quotient-based penalization. In the other two that penalization is linear (Jensen and PIRR). On the other hand, two indices measure the risk with σ (Sharpe and PIRR) and two others with β (Treynor and Jensen). We can thus build Table 4 (Gómez-Bezares and Gómez-Bezares 2015):

Table 4. Performance Indices.

| Performance Indices | Risk Measured with σ | Risk Measured with β |
|-----------------------------|-----------------------------|----------------------------|
| Quotient-based penalization | SHARPE | TREYNOR |
| Linear penalization | PIRR | JENSEN |

Other financial performance indices could be used, here we have chosen to use the three most classic ones and the PIRR (which in view of Table 4 complements them perfectly). There could also be other ways of measuring business performance, such as using accounting data, but reasons of data accessibility, adequacy, reliability, and frequency advise to use stock market data in this case.

4.2. Market Indices Selection

We will use the MSCI indices applied to four geographical areas, and the IBEX for the Spanish case. In the five cases we will compare the conventional indices with their corresponding ESG versions, as can be seen in Table 5.

Table 5. Market Indices.

| Conventional Index | ESG Index | Scope |
|-----------------------|---------------------------|------------------|
| MSCI ACWI | MSCI ACWI ESG | Worldwide/Global |
| MSCI Emerging Markets | MSCI Emerging Markets ESG | Emerging Markets |
| MSCI Europe | MSCI Europe ESG | Europe |
| MSCI USA | MSCI USA ESG | USA |
| IBEX 35 | FTSE4Good IBEX | Spain |

We use ESG indices because they are representative of how sustainable companies behave in the market, as the ESG criteria are frequently used in relation to sustainability (e.g., Taliento et al. 2019). We do not intend, therefore, that the companies included in the ESG indices that we use follow the SDC or any other specific ethical guideline (which, in any case, would be outside the scope of this research; however, as we have seen throughout the paper, they should not be too far from the vision of the SDC). We simply want, as we mentioned in the introduction, to see if we can maintain that sustainable companies are as or more profitable in the long-term than those that are not, thus justifying the economic logic of sustainability.

The MSCI indices are constructed in dollars and those referred to Spain in euros, for that reason the risk-free rate for the former will be the US three month treasury bill in dollars and for the latter the Germany three month bond in euros. The returns will be monthly gross total returns. The reason for the latter is that taxation does not interfere with

our reasoning; taxation that, on the other hand, differs among countries. The source has been Bloomberg.

The objective in the selection of the indices has been to look for indices that were known in the world of international asset managers, and that had both a conventional version and an ESG version that were easily comparable, although other indices could also have been chosen. In this way we can see if responsible investments beat or are beaten by conventional indices. The series have been taken since we have both indices (conventional and ESG) operational for each pair of indices (based on the Bloomberg update as of 2.19.19), so the time of beginning of the series varies from one pair to another, although for all of them the last month is January 2019 (more details can be found in [Gómez-Bezares and Gómez-Bezares 2019](#); the MSCI ESG indices have been taken in the “Leaders” version).

4.3. Empirical Contrast

Our objective at this point is simple: to compare the financial performance of the conventional index and of the ESG one in each geographical area. For this we will work with Tables 6–8 (for a wider detail you can go to [Gómez-Bezares and Gómez-Bezares 2019](#)). In Table 6 we find the averages (arithmetic means), variances and standard deviations of the 10 indices (5 pairs); the important thing is to compare each pair (conventional versus ESG), to see how each one has behaved. We see that the return averages are similar in each couple or with a tendency to be better in the ESG case; the standard deviation is always somewhat smaller in the ESG case.

Table 6. Data Analysis.

| | ACWI (GLOBAL INDEX) | | EMERGING | | EUROPE | | USA | | IBEX 35 | |
|--------------------|---------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| | ESG Index | CONV Index | ESG Index | CONV Index | ESG Index | CONV Index | ESG Index | CONV Index | ESG Index | CONV Index |
| Average | 0.5714% | 0.5746% | 0.5414% | 0.3885% | 0.2984% | 0.2372% | 1.0277% | 1.0971% | 0.2721% | 0.2161% |
| Variance | 0.1092% | 0.1145% | 0.1972% | 0.2121% | 0.3223% | 0.3237% | 0.1094% | 0.1141% | 0.1922% | 0.1961% |
| Standard deviation | 3.3040% | 3.3831% | 4.4409% | 4.6054% | 5.6770% | 5.6895% | 3.3072% | 3.3776% | 4.3845% | 4.4286% |

Table 7. Performance Indices.

| PERFORMANCE INDICES | | | | | | | | | | |
|---------------------|---------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| | ACWI (GLOBAL INDEX) | | EMERGING | | EUROPE | | USA | | IBEX 35 | |
| | ESG Index | CONV Index | ESG Index | CONV Index | ESG Index | CONV Index | ESG Index | CONV Index | ESG Index | CONV Index |
| Jensen | 0.0108% | 0.0000% | 0.1686% | 0.0000% | 0.0624% | 0.0000% | −0.0363% | 0.0000% | 0.0610% | 0.0000% |
| PIRR | 0.0766% | 0.0679% | 0.2322% | 0.0679% | 0.1057% | 0.0442% | −0.0105% | 0.0369% | 0.0153% | −0.0433% |
| PIRR-r _O | 0.0087% | 0.0000% | 0.1643% | 0.0000% | 0.0616% | 0.0000% | −0.0473% | 0.0000% | 0.0585% | 0.0000% |
| Sharpe | 15.2395% | 14.9755% | 10.6609% | 6.9609% | 4.4781% | 3.3932% | 29.9591% | 31.3905% | 7.1920% | 5.8572% |
| Treynor | 0.5177% | 0.5066% | 0.4979% | 0.3206% | 0.2559% | 0.1931% | 1.0228% | 1.0602% | 0.3216% | 0.2594% |

Table 8. Inferential Analysis.

| ESG Index | CONV Index | No. of Observations (Months) | BETA | R ² | Difference of Averages PROB > /T/ (N.D.) | Difference of Averages PROB > (NO N.D.) | Difference of Averages Test Ho = 0 | Beta Ho = 1 | Equality of Variances Test Ho Var(A) = Var(B) |
|----------------------------------|--------------------------------|------------------------------|--------|----------------|--|---|------------------------------------|-------------|---|
| Global M2WDESR Index | Global M2WD Index | 51 | 0.9725 | 0.9916 | 0.9434 | 0.7116 | YES | NO | YES |
| Emerging M2EFESR Index | Emerging M2EF Index | 51 | 0.9508 | 0.9723 | 0.1638 | 0.1185 | YES | NO | YES |
| Europe M2EUES Index | Europe M2EU Index | 136 | 0.9936 | 0.9915 | 0.1758 | 0.1943 | YES | YES | YES |
| USA TUSSLMU Index | USA M2US Index | 100 | 0.9688 | 0.9786 | 0.1619 | 0.1355 | YES | NO | YES |
| Spain IBXF4GNT Index | Spain IBEX35TR Index | 58 | 0.9805 | 0.9805 | 0.4892 | 0.4739 | YES | YES | YES |

We can also calculate the four performance indices (for the PIRR we also give the PIRR- r_0 version as this value will always be zero in the conventional index, just like Jensen, which makes it easier to compare with the ESG). In Table 7 we can see our four performance indices applied to the ten stock indices, which indicates the financial interest of each one in the analyzed period; since the periods are not the same in all cases, although they are within each pair of indices, comparisons should not be made between geographic areas.

The results are quite clear, there are no advantages of conventional indices. Specifically, all indices (except in the case of the United States, and this time, by a narrow margin) have better performance in their ESG version than the conventional mode. On the other hand, we must bear in mind that, a priori, if we assume efficient markets in the sense of Fama (1970), it would be expected that, given that these are well diversified portfolios, the index pair had the same performance; if we add to this that companies with a better ESG classification will incur costs to meet their social and environmental obligations, we must deduce that the ESG activity “at least” serves to compensate those costs. However, in view of the data, we would dare to affirm something else: it seems that the ESG activity, in addition to its social and environmental benefits, also improves financial performance.

A possible corollary of the above is that, given that the four performance measures always coincide in their decision on which index has beaten the other, despite some are linear and others are not, some measure the risk with σ and others with β , it seems that the four are very consistent, and this, without a doubt, gives to our conclusions greater robustness.

In Table 8 we have made some inferential analyses on the difference of averages (always for each pair of indices), both assuming normal distributions and disregarding such condition; also, on whether the beta of the ESG index is equal to the unit (which would coincide with the beta of the conventional index, which equals one by definition) and on the equality of variances ($\alpha = 0.05$).

The results lead us to the conclusion that the financial performances of the conventional and ESG indices treated in our study are very similar; same averages and variances can be accepted; although, in some occasions betas of the ESG indices are significantly lower than those of the conventional ones (specifically for the Global, Emerging, and United States indices); in addition, all betas are smaller than one for ESG indices (for conventional ones they are one) and it can be seen that the indices are highly correlated. This confirms again that the performance of the ESG indices is equal to or better than the performance of conventional ones.

The covid-19 crisis can be an unexpected laboratory to check how ESG indices behave, how resilient they are to major shocks. The results of MSCI (2020) show, as expected, their greater resilience against the conventional ones.

In conclusion, after seeing in the third section that it was logical to think that sustainable companies could be a good idea from the point of view of economic and financial profitability, we have now tested it empirically, thus confirming our second hypothesis.

5. Conclusions

In this work we have seen that business sustainability has an ethical and economic logic, so it can be a model to promote real development. From an ethical point of view, it can rely on human rights and civic ethics (Cortina 1994, pp. 104 et seq.); however, in this research we have focused mainly on sustaining and enriching business sustainability based on the Social Doctrine of the Catholic Church, rich source of wisdom that, in addition, can be shared in its exhortations by many non-Catholic people. We have also worked on its economic logic: seeing why it is reasonable for sustainable companies to obtain good results, formulating the model to overcome the agency problem (which gives it an advantage over the traditional stakeholder model), studying empirical contrasts that demonstrate the good performance of sustainable companies, and making a new contrast that confirms the above.

We see that we have answered our research question and confirmed our hypotheses.

Undoubtedly, we are facing a hot topic, which is of interest for economists, students of ethics and morals, businessmen, trade unions, politicians, and citizens in general. The search for a balanced development is an economic and political objective of the highest magnitude, and sustainable companies can contribute much to its achievement.

On the other hand, given the acceptance of sustainability in a fairly generalized manner among citizens, works such as this one, which associates it with the Social Doctrine of the Church, can contribute to a better knowledge, conformity, and application of this doctrine in our society.

The work has several limitations such as the difficulty of summarizing in a few pages the applicability of the Doctrine of the Church to business sustainability, or the problems of defining what an ESG investment is: the construction of the ESG indices has been criticized several times (Arribas et al. 2019b; Gómez-Bezares et al. 2019).

Among the future lines of research, we propose to deepen into the relevance of the social and environmental actions of companies, in the line of Kotsantonis et al. (2016).

However, above all it would be interesting to compare the Social Doctrine of the Catholic Church in its economic aspects with the doctrines of other Christian and non-Christian traditions—Judaism, Islam, etc.; let us remember the important development of Islamic Finance (Mansor et al. 2020)—seeing how they contribute to our concept of sustainability. We do not know such traditions sufficiently, but the set of Christian traditions, Judaism and Islam accept common origins, so they may not be so far apart regarding these topics. On the other hand, the natural law (PCJP 2005, no. 140), being universal, makes us think that all human beings of good will have to reach similar conclusions.

It will also be interesting to continue working on other forms of ethical foundation of sustainability, as well as advancing in its economic logic.

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