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Empirical Study Regarding Non-Financial Disclosure for Social Conscious Consumption in the Spanish E-Credit Market

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Abstract: Non-financial disclosure is an objective in The European Union to improve a sustainable economy where consumers can make conscious decisions, especially regarding the role of financial technology. Complete information is considered one that offers financial and non-financial information. Government and supranational authorities are starting to promulgate rules to construct a reasonable framework for non-financial disclosure. One consumer might make a social conscious decision if the information disclosed meets to the Directive 2014/95/UE guidelines. In order to analyse this condition in the e-credit market in Spain, this research measures the rank of compliance of European standards in non-financial disclosure. The main finding of this research is that non-financial information disclosure in the Spanish e-credit market is not sufficient to make informed decisions. Due to the fact that most of the non-financial information is focused on social issues related to a company's commitment to sustainability, non-financial information plays a relevant role in the building of an economically sustainable society. Our findings show that the level of non-financial disclosure in the Spanish e-Credit market is low, what supposes there is not an adequate informative base to decision making according to European standards on non-financial information. By considering the effect of usual disclosure drivers in this research field, the e-credit market sector was the only positive factor to disclose more non-financial information. Nevertheless, company size, company seniority and company location were not significant factors for non-financial disclosure.

Keywords: conscious consumption; sustainability; non-financial disclosure; european union consumers; accountability; informed decisions

1. Introduction

A socially conscious consumer is when "(...) he is or more likely to be she, is willing to engage in purchasing behaviour that may not be popularly accepted but is nonetheless consistent with his own standards of responsibility" [1]. In the same paper, Webster pointed out that perhaps it should be much easier to apply socioeconomic differences to identify socially conscious consumers. This research must be included in this socioeconomic focus for informed decisions making by consumers, according to non-financial information disclosed by companies.

Many years after Webster's idea, the research on social consciousness is still considered as an essential part of governmental strategies to improve social welfare by potentiating a social transformation [2]. Governmental influence is considered as an influential external factor on the consumer behaviour [3], perhaps because consumers cannot perceive the good behaviour of corporations as selfless behaviour, with the unique intention of building a fair society [4]. Even though the social role of companies has traditionally only been associated with their own economic interests,

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but in the last century the perspective of society regarding this role is changing. Currently, companies are increasingly involved in Corporate Social Responsibility [5] and they are taking their own role within the social consumption and the conscious decision.

The last financial crisis led to an increase of quick loans for personal finances, because of the rigidus rules applied by the traditional banking system [6]. This new manner of obtaining funds was possible thanks to the financial technology, that is contributing to the development of the financial market for people, families and small businesses. Thus, financial technology companies supply traditional banking services through an innovative process based on technology [7], both in terms of how to borrow money by telematic processes and the manner of granting them by analysing risk using algorithms that consider not only economic variables but also other characteristics of the consumer profile [8]. Accordingly, the e-credit can also be considered as an innovative financial product. Like any other innovative product, its acceptation can be linked to prosocial behaviour [9], by which the social benefit is the main factor to consume this new product. Nevertheless, this expansion of the financial market might be increasing a not so conscious consumption for people and small and medium sized companies. These ways to get money through e-credit or e-loans can be managed due to the development of the telecommunication market that has connected consumers and sellers. The main characteristics of these loans is that it is only possible to get small quantities of money, these loans are focused on particular personal needs, the money is used mainly to buy goods that are considered as a necessity within the social environment.

All these previous arguments drive us to consider on the one hand, that governmental actions are being focused on the expansion of the online financial market as one way to allow economic development and on the other hand, this expansion of financial market perhaps is causing the loss of social conscious consumption. Even more, governments also have the role of consumer protection and the promotion of a more sustainable society. Therefore, governments and institutions are involving corporations through an active role of awareness to their customers about sustainability and conscious consumption. Considering that corporative disclosure is a way to awareness about a sustainable society, governments are facilitating the improvement of corporative disclosure. The need for disclosure of enough corporate information to support a conscious financial consumption might be an objective for companies, who might contribute to developing an informative framework that allows conscious decision making, even more so in finances.

According to accountability in business, companies traditionally have been disclosing financial information for decision making [10] but in recent years the disclosure is being focused also on non-financial information [11]. In this way, supranational authorities have started to work on a completed informative framework for reporting. Within this framework, disclosure should allow the identification of those risks that could endanger the decision making for the development of a sustainable economy. With regards to this idea, non-financial corporative performance is considered as the material edge of the framework for social and environmental disclosure [12].

Many consumers base their consumption decisions on the fact of having quick credit. Previous work has found that the growth of consumer loans is linked to the growth of consumer supply [13]. It is for that previous reason that High-risk lenders have emerged for low-income consumers, who do not qualify for traditional banking and who are involved in a cycle of indebtedness, that finally has implications for social policies when they cannot cope with debt re-payments [14]. This way, if they do not have quick credit, maybe they would not make a non-conscious consumption.

These quick loans are managed online, in FinTech financial markets, mainly through the FinTech lending in the P2P modality. Spain has been a leader in banking-financial issues, partly supported by the different funding sources that have complemented it, both private and public sources.

The development of the Spanish financial market is partly supported by different funding sources, that have complemented it. This development is linked to the alternative online financial market. According to the data (Table 1), in Spain 80% of the credit is controlled by financial institutions but

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non-bank financing, around 22%, is managed mainly by peer to peer loans, Spain being the fifth European country in alternative financing by the Peer to Peer system [15,16].

Table 1. Scientists research on disclosure's factors.

%	Banks	Market
USA	30	70
UK	35	65
France	45	55
Germany	55	45
Italy	70	30
Spain	78	22

Source: Own development from the report [16].

Taking in account the data above and the fact that Spain is considered as a leader in CSR reports [17], this empirical research has been focused on non-financial disclosure in the Spanish e-credit market. Under the socioeconomic focus of Webster [1] for socially conscious consumption, it has been analysed whether this disclosure stands as enough informative base for informed decision making, according to the European standards.

The disclosure of non-financial information is very important for the economy and society because it improves transparency [18] and because it reports on the impact of business activity in society, in environmental aspects, human rights and corporate social responsibility. It is known that sustainability is associated with the competitive advantages for institutions and enterprises. Global Reporting Initiative (GRI) [19] is the best-known framework for voluntary reporting of environmental and social performances by companies. Social and environmental information plays a significant role in the sustainable development of organizations [20]. Previous works on non-financial disclosure found that disclosure quality offers economic and social benefits [21]. It is argued that standardized information can be an instrument for empowering societal players, when it is produced considering the needs of future users and for this the GRI shows that information must have, both usual format and content [22].

In the electronic credit market, where there is no "face to face" relationship, the only communication channel is the credit company's website. In this sense, all the consumer information in order to make decisions on will be on the web. It has been found that the information on the website has strong effects on consumer e-commerce purchasing decisions [23]. However, disclosure is not a perfect system to provide useful information and it can present the problem known as disclosure noise. The problem of "noise" in the disclosure manifests when managers and companies exercise discretion with respect to the disclosure of information about which they may have knowledge [24]. The noise is also generated by the massive amount of data to achieve insights able to impact on retailers' marketing intelligence [25]. For this problem it is recommendable to reduce the asymmetry of information in disclosure, because information disclosure is an essential component of regulation in financial markets, because it is an important factor for understanding the functioning of financial markets and it could affect market quality and could affect efficiency of real investment decisions and traders' welfare [26].

For all the reasons above, The European Union [27] is interested in standardizing non-financial information that is considered as a enough information for its disclosure. Specifically, within the framework of non-financial information, several specific problems are specified for the presentation of the reports.

Previous arguments support the need of analysing whether non-financial disclosure as the conceptual basis for social conscious decision making in an increasingly social global economy is being applied by online credit companies in Spain. Thus, this empirical research shows if the financial technology companies in the Spanish e-credit market are committed to the European guidelines for the development of financial sustainability by disclosing enough standardized non-financial information. The aim of this empirical research is to analyse the extent to which Spanish e-credit companies reporting on non-financial information indicators, according to previous works on reports for sustainable

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development and the disclosure in its role to informed decisions making [20], considering the methodology on non-financial disclosure scores [17,18,28]. The amount of non-financial information is measured by indexes to analyse if it could be a basis for decision making. When companies report high scores, according to the European guidelines [27] and KPI [19], it is considered that the disclosure offers enough information. The analysis of disclosure drivers is linked to this objective, because the knowledge of drivers is necessary in order to determine which variables can increase or decrease this disclosure. As in the previous literature (see Table 9), several drivers of disclosure have been analysed to explain how these variables can influence the value of the disclosure index. Therefore, several hypotheses on the relationship between each disclosure driver and non-financial disclosure scores have been tested. Bearing in mind that non-financial disclosure reports information on issues closely linked to social commitment and sustainability, it is assumed that if the non-financial disclosure score is low, the informed decision requirement is not being met and, therefore, it would be very difficult to make a socially conscious decision.

One of the most important contributions of this paper is the fact of relating the socially conscious consumption with the standardized non-financial information proposed by the European Union [27]. This is a relevant relationship because the European Union drives the European economy to a social orientation that it desires for European society. Also, it is an important matter because disclosure affects the quality of informed decision makings in financial markets, even more so, when it is an online emerging market, which is increasingly relevant for household economy, such as it is the Spanish e-credit market. Assimilation of European standards on non-financial information is the key for developing a future socially conscious consumption based on informed decision. Furthermore, it is a relevant issue for developing a theoretical framework for non-financial information, in order to facilitate the comparison for decision making in a financially sustainable society.

Our findings show that the volume of non-financial disclosure in the e-credit sector in Spain is still low. E-credit companies only provided a score of 36% of non-financial information recommended by The European directive. The results are much worse when it is detailed by topic, since the volume of information provided is the 16.9% for the social dimension, 12.3% for anti-corruption dimension, 6.8% for employee dimension and almost zero for human rights.

Previous results imply that not even 40% of information considered as a suitable volume is disclosed in a fast manner in the same website where citizens are consuming fast credit. This finding implies that would be not possible to make informed decisions for conscious consumption, because consumers would never reach to obtain sufficient non-financial information in the only channel of communication between consumers and lenders.

This finding improves the understanding of a part of the informative map desired by the European Union. Although the directive is not applicable to all types of companies, the findings help us to be aware that e-credit companies in Spain have not assumed a proactive role in facilitating a scenario for the complete information, both financial and non-financial information together. Whether it happens in an emerging market within the European Union, this may be happening in other credit markets via FinTech. Therefore, our research leads to recommend the need of replicating the analyses for other countries in order to easy a European non-financial disclosure map. Non-financial disclosure could emphasise many aspects relative to sustainable personal finances, ethical aspects on borrowed funds, the investment linked to the loans or other socially conscious decisions, taking in account that a recent research found that the non-financial disclosure was a strong predictor for individual decisions, such as donating decision [29]. Furthermore, the extension of our research to similar studies to other countries could also mitigate the limitations of comparability that entails having to compare with studies where the objectives and methodology are exactly not the same.

Our findings also show that non-financial disclosure in the Spanish electronic credit market is not affected by several traditional factors considered in the literature as accelerators or decelerators of the disclosure, such as the company location, the company seniority or the company size. These results can perhaps be by the Homogeneity of the e-credit sector in Spain, because they are mainly

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start-up firms whit similar economic characteristics. Perhaps also this result may be to the fact that these start-up companies have not develop a strong governance lead to social responsibility. In this sense, it would be interesting to analyse in future investigations the role of CEOs in relation to the disclosure of this type of voluntary information.

However, other relevant finding is that the specific e-credit sector by service in our research was a positive factor for disclosing more non-financial information. Regarding this result, the highest score corresponds to collective lending and collective financing companies, while the lowest score is for Direct Lending or Point-of-sale finance. This disclosure factor is what breaks the homogeneity of the non-financial disclosure in the Spanish e-credit sector, by showing that companies with a more social focus whether disclose more information to make informed decisions that allow a socially conscious consumption. This is an important result because this knowledge could facilitate the establishment of an online market that allows socially conscious finances based in the information.

All above leads us to suggest the need to extend the directive to non-financial disclosure for all companies which operate in the electronic credit markets, due to their customers can hardly access to another informative source. In this sense, a disclosure model would be necessary to do easier the comparison of this information and the management of the data on the company's website, perhaps through a complete report with financial and non-financial information designed ad hoc for this emerging type of business. Also, a reduce format of typified information could help to the financially non-expert customers to understand the content of non-financial information.

The scant history of the e-credit sector can help now to the early establishment of adequate information regulation that allows the conscious and sustainable consumption of finance.

This research enriches the current debate on the Directive and highlights new possibilities for empirical researches. The European Directive 2014/95/EU has increased a higher extent of voluntary reporting for some countries where the overall disclosure score is higher and for this reason the empirical research findings are relevant to disclosure practice and policy [30].

Thus, the theoretical approach considered for this work is summarized in Figure 1.

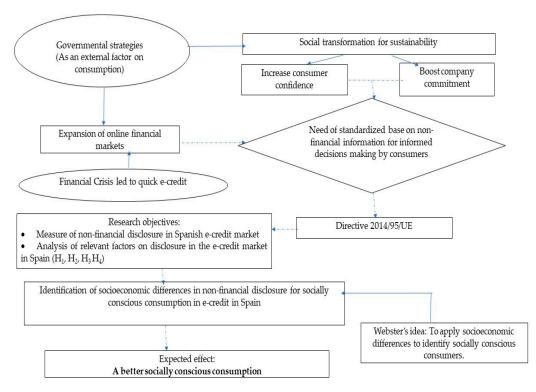


Figure 1. Theoretical approach for the analysis of non-financial disclosure for socially conscious consumption. (Source: Own development.).

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2. Material and Methods

2.1. Normative Framework and Literature

In the United Nations Conference [31] on sustainable development, this supranational organization highlights the importance of corporative reporting on sustainability, even more it is encouraged to integrate this information into their reporting cycle. Thus, United Nations enrols to industry, governments and stakeholders to develop models for best practices. It is focused on the integration of financial and non-financial information, taking into account experiences from already existing frameworks. Thereby, it is enhanced as a main goal of the European Union for the horizon 20x20.

The European Parliament in their resolutions 'Corporate Social Responsibility: accountable, transparent and responsible business behaviour and sustainable growth' and 'Corporate Social Responsibility: promoting society's interests and a route to sustainable and inclusive recovery,' considers that non-financial information is necessary for a sustainable global economy and by combining long-term profitability with social justice and environmental protection as the way to do it [32]. The goal of this rule is to ensure a sufficient level of comparability related to non-financial information for the European financial market. This information will focus on multidimensional nature of corporate social responsibility and the diversity of the CSR policies implemented by businesses.

Consequently, European Parliament and Conseils concreted the prior resolution by promulgating the Directive 2014/95/UE [27], which modifies the resolution 2013/34/UE [32]. This Directive has the main objective of identifying those risks that either do not allow to improve sustainability of companies or do not allow increased consumer trust. Thus, European society under this normative is driven to a financial conscious consumption. Regarding this idea, The European Union offers guidelines about how to report this non-financial information by large companies applying the previous Directive.

For the implementation of the directive, the European Union deluge in each country, being each member state who should concrete and adapt in specific context this rule. Accordingly, in Spain it was concreted in the adaptation for this member state, which was promulged trough a royal law [33].

Regarding the previous normative, the fields of non-financial information are focused on the following issues: environment, social matters, employee matter, human rights and anti-corruption.

For all the reasons above, the Directive 2014/95/UE [27] is currently considered as a reference on about the format to disclose non-financial information by companies in Europe and about the standardized issues to report. The directive should apply only to those large undertakings which are public-interest entities and to those public-interest entities which are parent undertakings of a large group. Despite the fact that this directive is mandatory only for large companies, due to it being the unique European official guideline to construct and disclose non-financial information, this could be applied to empirical analysis on the level of the non-financial information disclosed by any type of company, in order to check if small and medium firms are also going in the same direction as The European Union, regarding the sustainability of the economy for all countries and citizens.

According to corporative role in society, accountability was focused firstly on the owners and during the last century it is increasingly aimed at the stakeholders, in order to protect minority interests. Customers, employees and suppliers are considered stakeholders, as well as anyone that can be a receptor of the information provided by companies. Thus, information demanded by stakeholders is not only financial information but also data about social company engagement, even more so by considering its role to the development of a sustainable economy. Consequently, accountability is focused on the reporting of another type of information, such as non-financial information. Accordingly, accounting role is extended to reporting not only financial information but also non-financial information in order to report in a complete manner which allows conscious decision making. This information in online finances is disclosed mainly on the Internet and concretely on the Website, as it is the main way to keep in touch with this kind of companies and sometimes, the unique communication channel. So that, disclosure might be developed on the corporative website.

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Under the consideration of the disclosure on the Website, research has been focused on investigating several issues, especially the role of the research on Corporative Social Responsibility (CSR) disclosure [34–36], within the voluntary disclosure. This voluntary disclosure is considered as an extension of information provided for companies [37] in order to cover the informative needs of stakeholders [38] and also to legitimize the role of the company in society [39].

Non-financial disclosure as a part of voluntary disclosure has been analysed from different perspectives, such as the role of CSR in the voluntary disclosure and its implication on what and how the disclosure is made [11,40], the extension on disclosure to a full report on the company activity [41], the disclosure on environmental matters which involve company respect on the society or community [42,43] and significant factors for companies disclosure [44–46]. Directive 2014/95/UE [27] has summarized these matters researched in the literature. Anyway, The European Union collected in this directive [27] the social awareness on significant issues for the sustainability. Furthermore, research on voluntary disclosure developed several social issues that are now structured in the Directive 2014/95/EU [27] and for its Spanish adaptation by a Royal Law [33]. For the utility of applying the structure of the directive, the analysis of non-financial disclosure has been used in previous analysis in Spain [18].

Regarding previous studies, disclosure cannot be studied without the consideration that some factors can be causing significant effects on the topics, on the extension and on the opportunity of information. These factors are known as drivers to disclose. Drivers can cause a positive or negative effect on the disclosure. Consequently, several studies have considered this effect. For this reason, in this research four disclosure drivers have been considered, in order to study the role as determinants of disclosure, as Table 2 shows. Factors investigated in the scientific literature are mainly the industrial sector where the company operates in, company location, company seniority (or company age) and company size.

Location as a driver of voluntary disclosure is based mainly on economic and political differences [47], while industry type is argued as a driver of disclosure by regulatory differences among different sectors [48]. Analysis of company age as a factor for voluntary disclosure is based on the fact that company age has been used as a proxy of company risk [49] and whereby younger companies with less history need more voluntary disclosure than older companies [50]. Company size could be a driver of voluntary disclosure by the necessity of legitimacy because it could increase a positive consumer opinion [51] and because voluntary disclosure in large companies could be linked to corporate governance and the strategy of corporate communication [52], both are more developed in large companies.

Table 2. Scientists research on disclosure's factors.

Research	Approach and Findings
[11]	Objective: The factors of voluntary disclosure. Location: Germany. Sample: 130 listed companies. Methodology: Self-constructed CSR disclosure index based on the Global Reporting Initiative (GRI) guidelines. Main findings: Company size and industry sector found as relevant factors on CSR disclosure.
[18]	Objective: The analysis of the effect caused by Directive 2014/95/UE on the voluntarily disclosure. Location: Spain. Sample: Listed companies in IBEX-351. Methodology: Self-constructed non-financial index composed of five sub-indices and each area is composed by several Key Performance Indicator (KPI) based on GRI. Two hypotheses were tested. Main findings: Industry sector is shown as a significant and positive factor for non-financial disclosure. But company size is not identified as a significant factor for disclosure (companies Ibex-35, Spain).

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Table 2. Cont.

Research	Approach and Findings
[20]	Objective: The analysis of the extent to which Eurozone companies report on CSR indicators. Location: Eurozone. Sample: 306 listed companies in the STOXX Europe 600. Methodology: A content analysis according to the Integrated Scorecard Taxonomy Scoreboard of the Spanish Accounting and Business Association (AECA) and the factors that can influence its use. Four hypotheses were tested. Main findings: A relationship between the company size and the extent of CSR in listed company has not been found. A country effect on disclosure was rejected.
[42]	Objective: The research of the relationship between the individual corporate environmental performance and disclosure. Location: World scope. Sample: 100 international non-financial firms. Methodology: Measured environmental disclosure by the availability (or lack thereof) of information regarding 10 variables in the environmental datasets annually published by the companies and available in the Bloomberg ESG database. This work compares average for each variable of the 100 companies with the averages and a matched sample. Main findings: International firm is confirmed as a positive factor for better environmental disclosure.
[44]	Objective: The study of the association among three factors (corporate governance attributes, ownership structure and company characteristics) and the voluntary disclosure practices. Location: Kenya. Sample: Listed companies. Methodology: Longitudinal examination of voluntary disclosure practices in the annual reports from 1992 to 2001. Main findings: A positive relationship between company age and the level of CSR Disclosure was found. Also, there is a positive relationship between industry sector and CSR Disclosure.
[53]	Objective: The analysis of the voluntary disclosure practice. Location: Nigeria. Sample: 52 listed companies. Methodology: Disclosure index by 24 items and hypotheses tests. Main findings: Large companies tend to make more voluntary disclosure than other smaller firms.
[54]	Objective: The identification of the disclosure topics and the relationship with two relevant factors (Type of service and the location company). Location: Europe, Asia and North America. Sample: 91 Top FinTech companies. Methodology: Self-constructed disclosure index based on previous works. Fit of hypotheses by several tests. Main findings: Company location was not identified as a significant variable on the FinTech company disclosure but industry sector was a positive driver for the level of disclosure.
[55]	Objective: The analysis of the influence of company characteristics on CSR Disclosure. Location: Indonesia. Sample: 273 companies in Stock Exchange (2007–2998). Methodology: Indices based on GRI and regressions for hypotheses. Main findings: Company age (seniority) and company size were confirmed as significant factors on CSR disclosure.
[56]	Objective: Review of factors on disclosure in 64 empirical studies. Location: World scope. Sample: 64 research works. Methodology: A meta-analysis to identify potential moderators to the relationship between board, audit committee characteristics and voluntary disclosure. Main Findings: Company location was found as a moderator factor of voluntary disclosure.

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Table 2. Cont.

Research	Approach and Findings
[57]	Objective: Potential determinants of CSR disclosure practices Location: Spain. Sample: Listed firms. Methodology: Three ratings (Total CSR Score based on GRI performance indicators, CSR Content Rating and Management System Rating). Seven hypotheses were tested about the ratings' effects on the disclosure. Main findings: The results evidence that firms with higher CSR ratings present a statistically significant larger size and belong to more environmentally sensitive industries.
[58]	Objective: The analysis of the potential firm and industry characteristics on the CSR disclosure practises. Location: Bangladeshi. Sample: 135 manufacturing companies listed with the Dhaka Stock Exchange (DSE). Methodology: CSR Disclosure index and relationship with several variables. Main Findings: Findings document a positive relationship between firm size and CSR disclosure.
[59]	Objective: The review of the literature on risk disclosure and firm-specific characteristic (Firm size and theories, measurement of the firm size and finding out the importance of firm size on the level of risk disclosure). Location: World scope. Sample: More than 40 academic papers. Methodology: A content analysis. Main Findings: Company size is a factor with effects on the disclosure level on risk provided by listed companies.

Source: Own development.

This last argument is one of the determining factors that underlie voluntary disclosure. Therefore, regardless of the different theories that support the disclosure, including non-financial disclosure, the effect of this on consumers is and has been an objective of research in this field. Thus, this argument is also considered the main idea to relate non-financial disclosure on the website of Spanish e-credit market with conscious decision making.

2.2. Research Methodology

For all the reasons of above, it is possible to analyse non-disclosure online credit companies within voluntary disclosure on the corporative website in a completed framework by considering the previous normative and academic research, according to a global economy, what implies the relationship among e-disclosure and conscious consumption in e-consumers of finances was considered as the objective of the analysis. The main objective of the analysis is to determine if the categories of non-financial disclosure proposed by The European Union through the previous directive are offered to e-credit consumers on the same website where they contract financial products, that is in the corporative website.

Furthermore, and according to the above research, the analyses also is focused on determining whether the differences in the amount of non-financial disclosure in Spanish online credit sector could be explained by traditional factors, such as company location, the e-credit sector which the company operates in, company size or company seniority. As in previous empirical studies in the field [22,57,58], the following alternative hypotheses are developed in order to establish the determinant factors of social disclosure through non-financial information.

- H_1 : There is a positive relationship between the non-financial disclosure in the Spanish e-credit market and the company location.
- H_2 : There is a relationship between the non-financial disclosure in the Spanish e-credit market and the seniority of the company.
- \blacksquare H_3 : There is a relationship between the non-financial disclosure in the Spanish e-credit market and the e-credit sector which the company operates in.

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■ H_4 : There is a positive relationship between the non-financial disclosure in the Spanish e-credit market and the company size.

The alternative hypotheses (H_1 , H_2 , H_3 and H_4) suppose that there is a statistical association between the explained variable (non-financial disclosure) and each one of the different explanatory variables (company location, company sector, company seniority and company size). Accepting an alternative hypothesis would suppose that there is a significant statistical association between the explained variable and the explanatory variable. Therefore, previous argument supposes that the explained variable which measures the disclosure behaves in a different way in the groups that result by segmenting the sample according to the explanatory variable.

Each alternative hypothesis (which presupposes the difference in behaviour of disclosure in the different groups) are associated with a null hypothesis (H_0) in the opposite direction (which imply the equality of behaviour in the different groups). Accepting the alternative hypothesis implies the rejection of the linked null hypothesis and vice versa. In statistical terms, it is usually indicated if the linked null hypothesis is accepted. If the H_0 is accepted, the corresponding alternative hypothesis should be rejected and statistically it is supported that the disclosure on average is similar in the different groups. This allows to affirm that the factor (explicative variable used for dividing the sample in several groups) is not relevant regarding disclosure average in the groups and thereby, differences among groups related to disclosure's average of each one should not associate to the factor.

This research must also be included in the reporting of non-financial information, taking as a reference the structure of non-financial matters of the European directive as in other previous analysis. It is important to highlight that one methodological contribution of this research is just the use of this structure for researching the non-financial disclosure in e-credit sector, as this normative has been promulged for large companies and groups and not for small-medium size companies.

This research has been developed in several phases, one to collect the nonfinancial information disseminated on the website of each Spanish e-credit company and the other to analyse the information collected. For the first one, the website of Spanish e-credit market has been reviewed in detail over several months with a sample of 50 companies. The companies were selected from Spanish. "FinTech Map Report" [60] and from the report entitled "Fintech, innovación al servicio del cliente" [61]. Accordingly, 36% of the companies provided Crowdlending /Crowdfunding services, 36% of the companies offered Direct Lending or Point-of-sale finance, another 14% of the companies were focused on online credits and 18% could be framed in mini-credit and micro-credit.

To quantify the non-financial information collected, such as it is usual in the research of disclosure [62], the analysis has been made by applying indices to measure the compliance of the guidelines collected in the European directive and its Spanish adaptation. In accounting research these indices are used as a proxy about the information disclosed by companies [63]. The indices have been constructed as in other previous studies in the disclosure fields ([18,54,62,63].

The robustness of the empirical approach is supported by all previous studies that have been conducted over several decades in this field of research applying the same methodology, taking as reference those of recent years, especially those that have been applied to similar economic environments and objectives, such as in previous works [18,20,28,54,64,65]. Also, regulations and standards issued relative to the field of research that have been highlighted in this work have been considered for the methodology [19,27,33].

In this sense, the items applied for empirical research based on the contents that the European Union [27] considers necessary in relation to non-financial information. Thus, each item is a Key Performance Indicator (KPI) [19].

Thus, non-financial information should be catalogued in 5 topics: environmental information, social information, information regarding employees, information on human rights and anti-corruption information. In this study, only the last four have been considered, because the e-credit sector does not include manufacturing companies, so this environmental dimension is not a usual matter of reporting for these companies (see Table 3).

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Table 3. Requirements on non-financial information according to Directive 2014/95/EU.

Dimensions to Report in Non-Financial Disclosure	Aspect Collected in Each Item
Social Dimension	 Dialogue with local communities Website reports about partners and investors Company clearly defines the company objective regarding the society Reference to Non-financial information statement Information about the Social engagement or SCR Information about the stakeholders' opinions (Investors, customers, staff, employees, Advisors, etc) Data about Subsidies and aid
Employee Dimension	 Gender equality Implementation of fundamental conventions of International Labour Organization working conditions Health and safety at work Diversity of competences Diversity of the Board
Human Rights Dimension	Declaration about position respect to Human Rights
Anti-corruption Dimension	 Declaration about company's principles and values Information on Social Responsibility Anti-fraud process Security standards and vulnerability's control Compliance with legal regulations

Source: Own development from Directive 2014/95/EU [27].

The items (KPIs) include the informative aspects related to each one of the dimensions according to the European directive. Similar indices based on this Directive have been used in previous investigations [18]. In this way, each dimension is composed of a set of items according to the indicated directive. Although, the directive does not impose how much information should be given on each of the items, in previous studies aimed to measure the volume of disclosure, each item takes dichotomous values ("1" vs. "0"). This method has been used in other previous works in the research of disclosure because it is a neutral method to quantify the degree of compliance of the requirements included in the items ([21,28,46,64,65].

Thus, each sub-index corresponds to a matter of non-financial disclosures. As in previous studies [50], each sub-index has been weighted according to the specific weight of the total number of items of the dimension respect to the total number of items of the Non-Financial Information Index (NFII). In this way, the NFII is composed of the sum of all the weighted sub-indices, as has already been done in previous works [18,28,54,58]. In total, 20 items were included in NFII (see Table 4). A study aimed at the empirical analysis of the effect of the European directive on non-financial disclosure uses the same methodology, by applying to Total Score based on several partial compliance indices (1 vs. 0) [18].

Table 4. Non-Financial information and Sub-Indices for NFII.

Sub-Index	Weighing	Code
Social Dimension	7 KPIs: 35% of the NFII	SCIw
Employee Dimension	7 KPIs: 35% of the NFII	EPIw
Human Rights Dimension	1 KPIs: 5% of the NFII	HRIw
Anti-corruption Dimension	5 KPIs: 20% of the NFII	ACRIw

Source: Own development.

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Each partial index is calculated using the following formula:

Social Dimension: $SCI = \left[\sum_{i=1}^{7} SCIi\right]/7$ x 10; Which is composed by 7 items of compliance about social issues.

- Employee Dimension: $EPI = \left[\sum_{i=1}^{7} EPIi\right]/7$ x 10; Which is composed by 7 items of compliance about employee issues.
- Human Rights Dimension: $HRI = \left[\sum_{i=1}^{1} HRIi\right]/1$ x 10; Which is composed by only 1 item of compliance about human rights.
- Anti-corruption Dimension: $ACRI = \left[\sum_{i=1}^{5} ACRIi\right]/5$ x 10; Which is composed by 5 items of compliance about anti-corruptions and cybersecurity dimension.

Within the total of the 20 items reviewed for non-financial information, SCI makes up 35%, EPI another 35%, HRI 5% and ACRI 25%. For the construction of the non-financial information index (NFII), which is the total index used to measure the disclosure on the website, the previous patial indices have been added considering the previous weight (see Table 4 and previous literature):

- \blacksquare $SCIw = SCI \times 0.35$
- \blacksquare EPI $w = EPI \times 0.35$
- \blacksquare HRI $w = HRI \times 0.05$
- \blacksquare ACRIw = ACRI x 0.25

Therefore, the following formula conforms the NFII: NFII = SCIw + EPIw + HRIw + ACRIw

Regarding research objectives and the measuring instruments, descriptive statistics have been applied to a global analysis about the scores on disclosure. Furthermore, several parametric and non-parametric tests have been carried out to fit the hypotheses. In this way, the sample is divided in several categories to fit if the mean for NFFI takes similar values attending to the factor considered in the hypotheses. Therefore, several tests were applied depending on the normality or non-normality of the distribution.

Thus, the following tests were carried out:

- For the company location (H_1) , the sample was divided in to 3 categories and the Kruskall-Wallis Test was applied.
- For the company seniority (H₂), the sample was divided in to 2 categories and the Mann-Whitney U Test was applied.
- For the e-credit sector (H₃), the sample was divided in to 4 categories (Madrid, Barcelona and another mix location) and the Kruskall-Wallis Test was applied.
- For company size (H₄), the sample was divided in 4 categories and ANOVA test was applied.

3. Results and findings

The results are shown in two sections: Summary Statistics and Quantitative analysis.

3.1. Summary Statistics

Commensurate with the previous literature and the method applied to this research, the descriptive findings for our analysis are shown in Table 5 bellow. Note that the mean of NFII disclosed on the website is currently low, with only 3.6 points over a maximum of 10.00 points. Attending to each partial index—CCIw, EPIw, HRIw and ACRw—the means also take low values. Thus, all the partial indices show values below 3.5 out of 10.00 points. For human rights the index is non-existent practically (0.5 out 100 points), on the contrary, the partial index related to employee gets the highest value, which is 3.5 points.

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	N	Minimum	Maximum	Mean	Std. Deviation
SCIw	50	0.00	3.00	1.6900	0.60516
EPIw	50	0.00	3.50	0.6800	0.83152
HRIw	50	0.00	0.50	0.0100	0.07071
ACRw	50	0.00	2.50	1.2300	0.64055
NFII	50	0.00	8.00	3.6100	1.67298
Valid N (listwise)	50				

Table 5. Descriptive Statistics of indices.

Source: Own development from IBM statistic SPSS.

The results are according to [18] found for Spanish Listed companies and non-financial disclosure. Our results also are accorded to findings of financial and non-financial disclosure for companies in financial technology [54]. According to the analysis of [20] on the annual sustainability reports on the websites of companies listed, our results find also a low use of social indicators in non-financial information disclosed by companies of e-credit in Spain.

Perhaps the real reason for this lack of engagement with sustainability and its low disclosure could be the fact that some factor could be lessening the non-financial disclosure, such as the company location, the company size, the company seniority or the e-credit sector in which the business is being developed.

3.2. Quantitative Analysis

The quantitative analyses show the results according to the hypotheses.

3.2.1. NFII by Company Location (H_1)

By considering the location of the company, 46% of companies located in Madrid, 28% in Barcelona and 26% in another location of Spain. Consist with the categorical variable "LOC," NFII takes values between 3.4 points and 3.8 points out of 10.00. The differences found for each zone must be tested in order to establish if the location has some effect on the total volume of non-financial disclosure for these companies. By Shapiro-Wilk the analysis of normality for the variable NFII could not be considered for the distribution in the population, due to the statistic value for the last area ("Mix") took a significant p value (0.038 < 0.05) (see Tables 6 and 7).

LOC Statistic Std. Error Mean 3.4286 0.35494 Std. Deviation 1.32806 Barcelona Minimum 1.50 Maximum 6.00 Mean 3.6087 0.38236 Std. Deviation NFII 1.83375 Madrid Minimum 0.00 Maximum 7.00 3.8077 Mean 0.50172 Std. Deviation 1.80899 Mix Minimum 2.00 Maximum 8.00

Table 6. Descriptive results of NFII by Location.

Source: Own development from IBM statistic SPSS.

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AREA -		Kolmogoro	ov-Smirnov ^a Shapiro-Wilk				
•	IIILII	Statistic	df	Sig.	Statistic	Df	Sig.
	Barcelona	0.198	14	0.142	0.947	14	0.515
NFII	Madrid	0.152	23	0.183	0.964	23	0.557
	Mix	0.211	13	0.118	0.859	13	0.038
a. Lillie	fors Significan	ce Correction					

Source: Own development from IBM statistic SPSS.

 H_1 is rejected, which implies that NFII does not take different values on average in each of the three ranges that sample was divided considering to the company location. This result implies that the small differences in the values taken by NFII in the groups in which the sample was divided according to company location could be attributed to random error. Thus, this result supposes that NFII is not affected by company location, which has been raised in other studies as a relevant driver of disclosure. By rejecting H_1 , the associated null hypothesis should be accepted, which supposes that NFII takes similar values in the different sub-samples. Statistic value takes 0.086 with an associate probability of 0.985 > 0.05 (see Table 8).

Table 8. Kruskal-Wallis Test and ranks.

Ranks						
	LOC	N	Mean Rank			
	1.00	23	25.50			
NFII	2.00	14	24.71			
	3.00	13	26.35			
	Total	50				
	Test Statis	tics ^{a,b}				
		NFII				
Kruskal-Wallis H		0.086				
D8		2				
Asymp. Sig.		0.958				
a. Kruskal Wallis Test						
b. Grouping Variable: LO	С					

Source: Own development from IBM statistic SPSS.

The differences of score of disclosures when the sample is so divided do not allow identification of different behaviours in the disclosure, as in [54]. On the contrary, some results collected in [56] found differences in the disclosure score depending on the company location. Also, a relationship was found between the CSR disclosure and the country where the company is headquartered [20].

Under the analysis approach of the necessary requirements of disclosure for informed decisions according to the European Directive, beyond the resulting statistical data, this finding supposes that the companies of the different zones in the e-credit market in Spain have the same policy of scarce disclosure, perhaps because they are under similar regulations. Likewise, it may imply consumers of online credits in the market do not yet demand different levels of information requirements in Spain. Due to the fact that it is a very emerging market, they do not seem to be affected by the Theory of Stakeholders and accordingly, companies do not consider the interests of these stakeholders and they do not report on sustainability in the online financial markets.

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A practical implication of this result would be to analyse if in other countries of the European Union similar results are found for investigations with the same approach, in order to know if the level of informative demand in other locations can be linked to other factors, such as the level of financial education or as better policies in education about sustainability. Even more, it would allow to conclude whether there are different social profiles of consumers of e-credit for different disclosure locations.

On the other hand, companies located in areas with a higher concentration of FinTech should consider greater compliance with the recommendations of the European Directive, which, although not being mandatory for all type of company, could make a strategic difference of segmentation towards more trained consumers. These consumers would have better perspectives of sustainability, thus opening an interesting market gap in favour of the FinTech market and the development of trade associated with them.

3.2.2. NFII by Company Seniority (H₂)

Regarding the average age of the FinTech credit companies, for the comparison of means of these companies, a dichotomous variable as "young" for those who are 5 years old (value 1) and as "adult" for those who are more than 5 years old of seniority (value 2) (variable "C_Seniority"). Accordingly, 35 companies were classified as young FinTech and 15 companies were considered adult FinTech. Means for both two seniority categories are 3.60 and 3.63 points (see Tables 9 and 10).

Table 9. Descriptive results for NFII by company seniority.

	C_Seniority		Statistic	Std. Error
NFII		Mean	3.6000	0.28756
	"young FinTech"	Median	3.0000	
	(1.00)	St. Deviation	1.70121	
		Minimum	0.00	
		Maximum	8.00	
	"Adult FinTech"	Mean	3.6333	0.42947
		Median	3.0000	
	(2.00)	St. Deviation	1.66333	
		Minimum	2.00	
		Maximum	7.00	

Source: Own development from IBM statistic SPSS.

Table 10. Test of Normality.

	C_Seniority	Kolmogorov-Smirnov ^a Shapiro-Wilk			Vilk		
		Statistic	df	Sig.	Statistic	df	Sig.
NFII	1.00	0.181	35	0.005	0.965	35	0.317
	2.00	0.219	15	0.052	0.864	15	0.027
a. Lilli	efors Significand	0.217		0.032	0.004	13	

Source: Own development from IBM statistic SPSS.

About normality, while that by Kolmogorov normality could be accepted, for groups <30 observations it is better to use Shapiro´-Wilk test, which for adult companies takes a p-value (0.027) < 0.05 and thus normality is refuted (See Table 11).

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Ranks						
	C_Seniority	N	Mean Rank	Sum of Ranks		
	1.00	35	25.74	901.00		
NFII	2.00	15	24.93	374.00		
	Total	50				
Test Statistics ^a						
			NFII			
Mann-Wh	nitney U	254.000				
Wilcox	on W		374.000			
Z			-0.181			
Asymp. Sig. (2-tailed)			0.856			
a. Grouping Variable: C_Seniority						

Table 11. Test of Mann-Whitney and ranks.

Source: Own development from IBM statistic SPSS.

 $\rm H_2$ is rejected, which implies that NFII does not take different values on average in each range considering to the company Seniority. This result implies that the differences in NFII in the groups according to the company seniority could be attributed to random error. Thereby, this result supposes that NFII is not affected by company seniority, which cannot be considered as a relevant driver of disclosure. By rejecting $\rm H_2$, the associated null hypothesis is accepted. This supposes that NFII takes similar values in all the sub-samples made according to the company seniority (p-value 0.856 > 0.05).

In some previous works, the company seniority was a relevant factor on extending the disclosure. A positive relationship was found between the level of CSR Disclosure and company age [44], in opposition to the results found in our empirical analysis. Neither of our findings confirm the conclusions of [55], where association between company age an information disclosure were found.

The interpretation of this statistical result supposes that the e-credit companies with more history do not disclose more information than those with less history. This may be because the fact that, although there are companies with more seniority in Spanish e-credit market, the novelty of FinTech business does not allow to spend any time to the disclosure. Disclosure is usually developed by the most experienced managers, within very established companies in the market. A future perspective may focus on the analysis of differences in the behaviour of CEOs in the application of the recommendations of the European Directive.

For companies with greater seniority should consider policies to improve disclosure as a form of commitment to customers and the improvement of transparency in financial markets. Also, it allows to strengthen their market share within an increasingly focus of finance and sustainability in the European Union. For companies with less history, the implementation of information expansion policies can also be a differentiating point in defining the profile of consumers-customers that they want for their business.

3.2.3. NFII by e-Credit Sector (H₃)

The means take very different values considering the e-credit sector (see Table 12). By the p-value (0.000 < 0.05) by Shapiro-Wilks normality it is not accepted for the quantitative variable NFII (see Table 13).

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Table 12. Descriptive results of NFII by FinTech service.

	E-Credit S	Sector by Service	Statistic	Std. Error
		Mean	4.3611	0.42551
	1.00	Median	4.5000	
	1.00	Std. Deviation	1.80527	
		Minimum	0.00	
		Maximum	8.00	
		Mean	2.8571	0.30305
	2.00	Median	3.0000	
NFII	2.00	Std. Deviation	0.80178	
		Minimum	1.50	
		Maximum	4.00	
		Mean	4.0000	0.82375
	3.00	Median	4.5000	
	5.00	Std. Deviation	2.17945	
		Minimum	1.50	
		Maximum	7.00	
		Mean	3.0000	0.29978
	4.00	Median	3.0000	
	4.00	Std. Deviation	1.27187	
		Minimum	2.00	
		Maximum	7.00	

Source: Own development from IBM statistic SPSS.

Table 13. Test of Normality.

	E-Credit Sector by Service	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
	1.00	0.143	18	0.200 *	0.959	18	0.591
NFII	2.00	0.185	7	0.200 *	0.967	7	0.877
	3.00	0.183	7	0.200 *	0.899	7	0.327
	4.00	0.333	18	0.000	0.729	18	0.000

^{*.} This is a lower bound of the true significance.

Source: Own development from IBM statistic SPSS.

 $\rm H_3$ is accepted, which implies that NFII takes different values on average for each of group according to the e-credit sector where company operates in. Thus, the differences in NFII in the groups according to this driver could not be attributed to random error. Thereby, this result supposes that NFII is associated to the company sector in the e-credit market in Spain. It means that company sector is a relevant driver of disclosure. By accepting $\rm H_3$, the associated null hypothesis is rejected, thereby it is possible to affirm that NFII does not take similar values in all the sub-samples made according to the company sector (p-value is 0.035 < 0.05). This result implies that the e-credit sector is associated to the NFII. Consequently, the e-credit sector is a disclosure driver for the non-financial disclosure in the Spanish e-credit market (see Table 14).

a. Lilliefors Significance Correction

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Table 14. Test of Kruskall-Wallis and ranks.

Ranks			
	E-Credit Sector by Service	N	Mean Rank
NFII	1.00	18	32.78
	2.00	7	19.71
NTII	3.00	7	27.36
	4.00	18	19.75
	Total	50	
Test Statistics a,b			
		NFII	
Kruskal-Wallis H		8.626	
Df		3	
Asymp. Sig.		0.035	
a. Kruskal Wallis T	est		
b. Grouping Variab	ole: FTservice		
	0 0 1 1 · · (TD) (open	

Source: Own development from IBM statistic SPSS.

The same result in works about CSR Disclosure were found [11,44]. For financial and non-financial disclosure, industry sector also was a driver for the extension in the disclosure on the website [54]. For non-financial reporting in listed companies, the industry sector was identified as a relevant variable for the level of disclosure [18]. In Spanish listed, more environmentally sensitive industries are associated with higher CSR ratings [57].

These results encourage to the extension of the research considering the joint analysis of this factor in a linear regression model to see the degree and sense of the association of each of the e-credit sectors with the disclosure. Also, for investigating some other variable, such as the fact of being a company subject to inspection by the Central Bank of the country or by other regulatory authorities in the financial markets. This result leads to consider the analyses of another factors, such as considering a positive factor on disclosure the fact that company's financial statements were audited.

These findings are interesting for consumers of e-credit in order to identify the different subsectors of e-credit market considering their disclosure policy regarding sustainability. This fact is important because a part of the online financing is being linked to the development of sustainable economic activities in an emerging alternative financial way. This fact of informative differentiation is very important for the economic development of sustainable and fair markets and therefore, for the informed decisions making that allows the consumer the selection of fairer investment and financing alternatives.

3.2.4. NFII Attending to Company Size (By Employee) (H₄)

There are different proxies to use the company size as an explanatory variable, such as total assets, total sales and market capitalization [66]. For the disclosure study of the e-credit companies, it is more advisable to use the number of employees, because their nature of start-up company causes that usually they do not have a high amount of investment in assets, nor do they have a volume discriminant sales, neither are listed companies, so other authors have set the proxy based on the number of employees, even more when the General information on firms is more limited [67].

For this research company size by employees offered by [61] has been used for the H₄. Thus, the group from 1–5 employees is classified as micro companies (group 1), from 6 to 15 is considered as small companies (group 3), from 1 to 50 is defined as medium companies (group 3) and finally more than 50 employees for large companies (group 4).

Regarding the above, 24 companies are micro companies, 16 companies are small companies, 5 companies are medium companies and another 5 companies are large companies.

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The distribution of NFII confirms the normality requirement and the homogeneity of variances is assumed. F of Snedecor has an associated p-value of 0.650 not significant for accepting the alternative hypothesis expressed by H_4 and thus the relationship between the NFII and the company size is not relevant. That is, H_4 is rejected. This rejection implies that NFII does not take relevant different values for each group considering to the company size. By rejecting H_4 , the associated null hypothesis is accepted, that supposes that NFII takes similar values in all the sub-samples obtained when the sample was segmented according to the company size (see Tables 15–18). This result leads to conclude that the company size cannot be considered as a relevant factor of non-financial disclosure.

Table 15. Descriptive for NFII attending to company size.

	Company Size	Kolmogorov-Smirnov a		Shapiro-Wilk			
	-	Statistic	df	Sig.	Statistic	df	Sig.
	1.00	0.199	24	0.015	0.960	24	0.442
NFII	2.00	0.166	16	0.200 *	0.913	16	0.132
	3.00	0.243	5	0.200 *	0.894	5	0.377
	4.00	0.238	5	0.200 *	0.873	5	0.281

^{*.} This is a lower bound of the true significance.

Source: Own development from IBM statistic SPSS.

Table 16. Descriptive for NFII attending to company size.

NFII								
	N	Mean	an Std. Deviation	Std. Error	95% Confidence	95% Confidence Interval for Mean		Maximum
	1	Wican	Std. Deviation	Stu. Liioi	Lower Bound	Upper Bound	Minimum	Maximum
1	24	3.3125	1.66689	0.34025	2.6086	4.0164	0.00	7.00
2	16	3.7813	1.81630	0.45408	2.8134	4.7491	1.50	8.00
3	5	3.9000	0.89443	0.40000	2.7894	5.0106	3.00	5.00
4	5	4.2000	1.98746	0.88882	1.7322	6.6678	2.50	7.00
Total	50	3.6100	1.67298	0.23660	3.1345	4.0855	0.00	8.00

Source: Own development from IBM statistic SPSS.

Table 17. Test of homogeneity of variances

		Levene's Statistic	df1	df2	Sig.
	Based on Mean	0.987	3	46	0.407
NFII	Based on Median	0.580	3	46	0.631
	Based on Median and with adjusted df	0.580	3	42.285	0.631
	Based on trimmed mean	0.918	3	46	0.440

Source: Own development from IBM statistic SPSS.

Table 18. ANOVA for NFII attending company size.

		NFII			
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.754	3	1.585	0.551	0.650
Within Groups	132.391	46	2.878		
Total	137.145	49			

Source: Own development from IBM statistic SPSS.

a. Lilliefors Significance Correction.

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There is not a closed conclusion on the size effect on disclosure of information by companies. Several studies found that the size in listed companies is a positive factor to extend the company disclosure [11,53,55,57,59] and also for other types of companies in less developed countries [58]. Furthermore, findings confirm that international firms also extent their environmental disclosure [42]. The results of our study contradict to those authors as there was no significant correlation found. These results are according to other works whose findings did not find the size effect on disclosure [18,20].

The results obtained in this work and the fact that the specialized literature does not find conclusive values about the effect of company size in the dissemination, reaffirm us in the need to replicate the study to other countries of the European Union. It would be interesting to analyse the statistical relationships among factors, as well as other variables not considered, previously indicated, such as financial literacy, literacy in conscious consumption or in sustainable economy in the country, in order to determine if they could be conditioning to the disclosure.

Larger companies should adopt a more active voluntary non-financial disclosure policy in line with European guidelines, since the economic activity of larger companies may have a greater impact on sustainability, because they affect more consumers and more stakeholders. For this reason, it is important that their disclosure policies facilitate the informed decisions making on the consumption of e-credit.

Table 19 shows a summary of the results according to the empirical analysis and the implications for the research approach.

Alternative Hypothesis	Explained Variable	Factors	Acceptance	Rejection	Research Meaning
H ₁	NFII (non-financial disclosure measured by the index)	Company location		x	The difference in the measures of central tendency taken by NFII in each of the groups in which the sample was divided, according to the company location, is not significant. The company location is not a factor for non-financial disclosure.
H ₂		Company seniority		x	The difference in the measures of central tendency taken by NFII in each of the groups in which the sample was divided, according to the company seniority, is not significant. The company seniority is not a factor for non-financial disclosure.
Н3		E-credit sector	x		The difference existing in the measures of central tendency taken by NFII in each of the groups in which the sample was divided, according to the e-credit sector, is significant, so that these differences could not be attributed to the random error. The e-credit sector is a relevant factor for non-financial disclosure.
H ₄	_	Company size		х	The difference in the measures of central tendency taken by NFII in each of the groups in which the sample was divided, according to the company size, is not significant. The company size is not a factor for non-financial disclosure.

Table 19. Hypotheses, results and research implications.

Source: Own development.

4. Discussion, Limitations and Conclusions

The non-financial disclosure is the objective of this empirical research, due to its implications of accounting on the companies' social commitment to provide a good informative base to socially conscious decisions in the new personal finances. One of the objectives of The European Union is to improve the economy, making it sustainable. Thus, consumers could make conscious decisions, especially with regards to the role of financial technology in all countries. Technology moves large groups of consumers through electronic commerce. These consumers need to make quick decisions in the online market. In this online market, the main way to contact the company is via the website. Thus, the website is the daily channel of communication between the consumer and the seller. According to

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the European objective of sustainability, the expansion of financial technology must contribute to build a better market based on sustainability, within a sustainable society.

On the other hand, sustainable conscious in citizenship is also a European goal to drive markets towards sustainability. It is at this point where companies must make an active role to improve the markets in order to facilitate all the elements for decision making. Among elements for decision making the information plays a key role and the companies can make a passive approach or an active one. Companies engagement related to this sustainability is to contribute to the construction of a complete informative framework, in order to facilitate the information for conscious decision making. This is known as informed decisions ([17,20]. Information is considered as enough quantity when it offers a mix of financial and non-financial information, which allows economic decision making but considers the social consequences of the economic activity, linking so economic activity, conscious decision making and social sustainability.

Disclosure by companies is providing some non-financial information related to issues which are usually involved in the sustainability line. It is for this reason that government and supranational authorities are starting to promulgate rules and laws to construct an informative reasonable framework [19,27,33]. This framework wants to concrete what type of information must be included in non-financial information. This would allow us to prevent the noise phenomenon of information, which is associated with the disclosure of information on the Internet. For large companies this framework is developed through the Directive 2014/95/EU [27] but this rule also considers other global initiatives and social issues collected by the research over several decades.

Accordingly, the first necessary element to make decisions is the information. If companies cannot or do not want to improve the information provided, consumers will not be aware of the consequences of their consumer decisions. It presumes that one consumer cannot make a conscious decision when He or She has not got enough information, which does not allow for socially conscious consumption. Currently, by online informative channels, disclosure plays a key role in the decision making in markets. Even more, non-financial information is increasingly taking a relevant position within the framework for sustainability and for decision making in a conscious way. Nevertheless, only a good quality information could fulfil this relevant role to construct a sustainable society. For this reason, both literature as organizations and governments are trying to develop informative standards. It is the reason that non-financial information is very important in the construction of sustainability in society.

The standards facilitated by GRI [19] and by the directive [27] are considered as an inflexion point in the quality of non-financial information. Regarding this, information disclosed by companies should attend to several categories or matters considered as informative needs to develop a sustainable society.

To analyse whether fast electronic consumption could be a conscious consumption in the electronic credit market in Spain, it is necessary to measure the degree of compliance with the non-financial information standards (KPI), because they are being used as a global reference in the non-financial disclosure. Furthermore, it is necessary to know if there are differences in the scores in non-financial disclosure, in order to improve the informative base used for making decisions on social consumption. The proactive role of several factors could be increasing the amount of non-financial standardized information disclosed by the companies.

The main finding of this research regarding the amount of non-financial disclosure shows that the total volume disclosed by the e-credit market in Spain is very low to enable social conscious decisions, due to the fact that there is hardly any information on the social focus in these companies. The e-credit sector effect in which company operates in, maybe would explain the differences in the scores of non-financial information disclosed by e-credit companies, due to the association between this factor and the non-financial information score, as corroborated in previous studies. Higher volume of non-financial information is linked to the company sector in the e-credit market in Spain. Our findings show that Crowdlending /Crowdfunding companies are the e-credit sector with a higher mean in non-financial disclosure. The second position in non-financial disclosure is for online credit companies,

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while the third position corresponds to the sector of companies for mini and micro-credit. The lowest index of non-financial disclosure is for Direct Lending or Point-of-sale finance. The interpretation of these findings under the socially conscious consumption approach would imply that there is insufficient information for informed decision making in the Spanish e-credit market.

These findings could be linked to the social engagement of the credit sector. Crowdlending and crowdfunding are ways to finance social projects, therefore a higher disclosure is showing a stronger social engagement by this type of e-credit companies. The lowest index shown in direct lending companies and point-of-sale companies are an expected result, as these companies are not enrolled in social engagement yet. For another factor, such as location, it is argued that the reason is the differences in business culture and consequently, the differences in business behaviours [56]. Our finding refuted this conclusion, as it has been found in previous studies. This result confirms that in not one location in the Spanish e-credit market the necessary information is not disclosed for social conscious consumption making.

It is true that the application of the European Directive for non-financial information is not required for all kinds of companies and so, it could be a limitation in order to compare with findings found in previous analysis. Nevertheless, results are important to show that the Spanish e-credit market is not clearly closed to providing an acceptable score of free standardized non-financial information, which is essential to decision making in online markets. In the literature review on the risk information providing by companies [68], the need of encouraging to firms in to produce decision-useful information was concluded. Even more, the authors did find scant support in literature for doing more regulation but nevertheless, they consider that the improvement of the current regulation could be a good goal in for building this decision-useful framework. In this way, our first recommendation refers to the consideration of the use of new key non-financial information indicators adapted to characteristics of small-medium companies whose business is based on online transactions. Under this consideration, non-financial information indicators should emphasise aspects relative to sustainable personal finances. Even more, ethical aspects on borrowed funds and the investment of the financial performance linked to the loans should be considered in the analysis of non-financial information. Another issue related to the low non-financial disclosure score is the problem of comparing information by online loans consumer, not only for the absence of non-financial information but also for the format of providing this information. Regarding this problem, non-financial data on the website for e-credit companies could integrate in a standardized digital file (XBRL) based on electronic tags for each standardized item, to facilitate user information management, as proposed formerly in other studies for listed companies [20].

Regarding the determinants of non-financial disclosure, the seniority of the company seems to be an influence on the disclosure as company seniority implies management styles [55,69]; but the results of our research indicate that for the Spanish e-credit market there is no association. This finding does not allow us to offer any closed conclusion about whether this result could be different by extending the sample, as the e-credit companies have less seniority. This conclusion could be a restriction for a longitudinal analysis. We consider it is necessary to continue deepening the study of the differences in the extension of non-financial disclosure according to the size of the company. In addition, to extend these studies to similar electronic credit companies in other countries would be positive to construct a theory of disclosure, although the results would be comparable relatively, due to the fact that the specific characteristics of the country shape the adaptation of the European Directive in each member state. Nonetheless, descriptive results could help to know if the non-financial disclosure in these countries is lower or higher than in Spain. This knowledge would lead to a deeper understanding of informative base which is provided to consumers in each country and would help to design specific standards for non-financial useful disclosure on the website for conscious consumption.

Finally, Company size, as opposed to other studies [52,59] does not seem to be a relevant factor. Thus, the only conclusion that can be anticipated is that maybe the small o micro companies in the e-credit market are focusing all their efforts on their daily management. It implies that these companies

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maybe cannot spend time to prepare non-financial information to be disclosed and they are not considering their role in providing information for informed decisions.

To conclude, it can be noted that the Spanish e-credit market does not seem to perceive the need for standardized non-financial disclosure yet, as probably occurs in other e-credit markets in other countries. Due to this research took place only on the Spanish e-credit market, as in other studies on consumption, it should be highlighted that the replication of the current research in other countries, maybe it would help the generalizability of the findings [70]. This would also eliminate the comparative limitations of the findings, by identifying those endogenous variables that could have indirect causality over non-financial disclosure, such as those due to the attitude of CEOs. Although there is no complete method to eliminate this problem, the combination of several methods in research in corporate finance is recommended [71]. Hence the need to replicate and expand similar studies to the same sector but in other countries. Perhaps, if companies for e-credit can benefit from rapid access to consumers' insights, such as in the approach proposed by [25] for marketing intelligent, consumers and companies of e-credit would be aware of the consequences for social conscious consumption. Even more, both could be aware on how important the non-financial disclosure could become as a good informative framework for social conscious consumption, in order to make a useful integrated reporting for accountants, auditors and consumers [72].

Future extensions of this research could be focused on analysing which sectors of the e-credit markets in Europe better meet the requirements of non-financial disclosure proposed by the European Union to standardization of reporting linked to social issues and sustainability; with the final aim of analysing which cultural variables define both clients and e-credit providers less sensitive to sustainability values and conscious consumption of finance. This would allow to improve the knowledge for the design of educational policies that integrate the financial literacy with the literacy in sustainable Economy.

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