Article

Business Models and Sustainability Plans in the FinTech, InsurTech, and PropTech Industry: Evidence from Spain

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Abstract: After describing the main features of the Spanish companies belonging to the FinTech, InsurTech, and PropTech sectors, the main objective of this study is to analyze whether their B2B/B2C business models are related to the existence of sustainability plans. Specifically, this paper analyzes whether the existence of a sustainability department is a determining factor for the business model adopted by the Spanish FinTechs, InsurTechs, and PropTechs. By using the multinomial logit regression, other factors such as the current closeness of companies to the sustainable development goals (SDGs), the sensitivity to domestic and European FinTech/InsurTech regulations, and the perception of FinTechs about such European regulations are debated before conclusions are drawn for a future research agenda.

Keywords: FinTech; InsurTech; sustainable development goals; sustainability performance; logit regression

1. Introduction

The financial industry is constantly coining new terms to label and categorize emerging concepts, ideas, technologies, and activities such as 'FinTech', 'PropTech', 'InsurTech, 'RegTech', or 'WealthTech' (see Figure 1). Consequently, the 'Tech family' continuously increases, with new relevant neologisms by adding the –Tech suffix to a prefix which quickly becomes part of trend reports [1]. However, although almost self-explanatory, sometimes these terms can be a bit confusing.
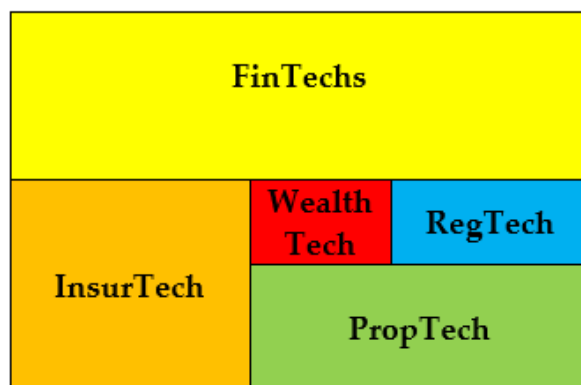

Figure 1. FinTechs. Source: own elaboration.

Recently, some scholars (e.g., [2]) highlighted that, after the 2007–2008 global financial crisis, research flourished on entrepreneurship through digital innovation in the financial market as well as on investors' influence on digital technology-based entrepreneurs' funding decisions. Despite the high expectation generated, some scholars [3] consider that the expected growth has not been reached in the real world because FinTech is innovative but inherently unpredictable. This means that customers are still hesitant to adopt and use FinTech, which ultimately affects its growth.

On the other hand, InsurTech is a phenomenon comprising innovations of one or more traditional or non-traditional market players exploiting information technology to deliver solutions specific to the insurance industry [4]. This application of new technologies to the insurance sector has not only had a great revitalizing effect on a traditionally stable and oligopolistic sector but has also prompted a redefinition of the roles of insurance companies and greater prominence has been given to consumer needs, adapting the offer towards more attractive products where the user seems to occupy the center of the business model [5], fostering value co-creation patterns.

Finally, PropTech is going to have an increasing impact on the real estate sector in the future due to the potential disrupting of the world's oldest and largest industries, starting from the registry that can be validated with blockchains. We expect to see PropTech also playing an increasingly important role in financial, commercial and residential real estate.

Within this introductory **framework**, the **main objective** of this study is to analyze whether the B2B/B2C business model followed by the Spanish companies of FinTech, InsurTech, and PropTech is related to the existence of sustainability plans in such companies. Specifically, this paper analyzes whether the existence of a sustainability department is a determining factor for the business model adopted by the Spanish FinTechs, InsurTechs, and PropTechs. However, RegTech, WealthTech, and other peculiar FinTechs recalled in Figure 1 will not be treated in this paper, leaving space to further research. **Methodologically**, we will use the multinomial logit regression to relate some categorical variables concerning the implementation of sustainability measures in FinTechs with the consumers' demand for financial products (which determines the business model). The **findings** reveal that the growing demand for financial products from other companies (B2B operations) can be identified with a higher presence of sustainability departments in Spanish FinTechs.

To do this, the **organization** of this paper is as follows. After this introductory section, Section 2 illustrates the literature review. Section 3 is dedicated to the materials (sample questionnaire) and the methodology employed in this paper. Section 4 displays the results, followed by a discussion (Section 5). Finally, Section 6 summarizes and concludes.

2. Literature Review

Existing research papers have focused on FinTech, InsurTech, and PropTech from different perspectives. Some scholars emphasize the relation between **FinTech** and technology-enabled financial solutions, as the new marriage of financial services and information technology combined words (Fin+Tech) are considered [6]. FinTechs are considered a disruptive, competitive, and sustainable industry [7]. This line of research has been well developed in recent years with numerous publications addressing the topic. Digital financial and FinTech services have emerged as a part of the fourth industrial revolution [8]. These services, generally supported and welcomed by consumers, have now reached a stage that lets them disrupt traditional financial structures, disintermediating old-fashioned supply chains. Cortina and Schmukler [9] point out that the period since the credit crunch of 2008 has been characterized by the emergence of a broad set of tech-driven financial companies (i.e., FinTechs), acting in parallel with traditional banking services. A taxonomy of the main FinTech functions is represented in Figure 2.
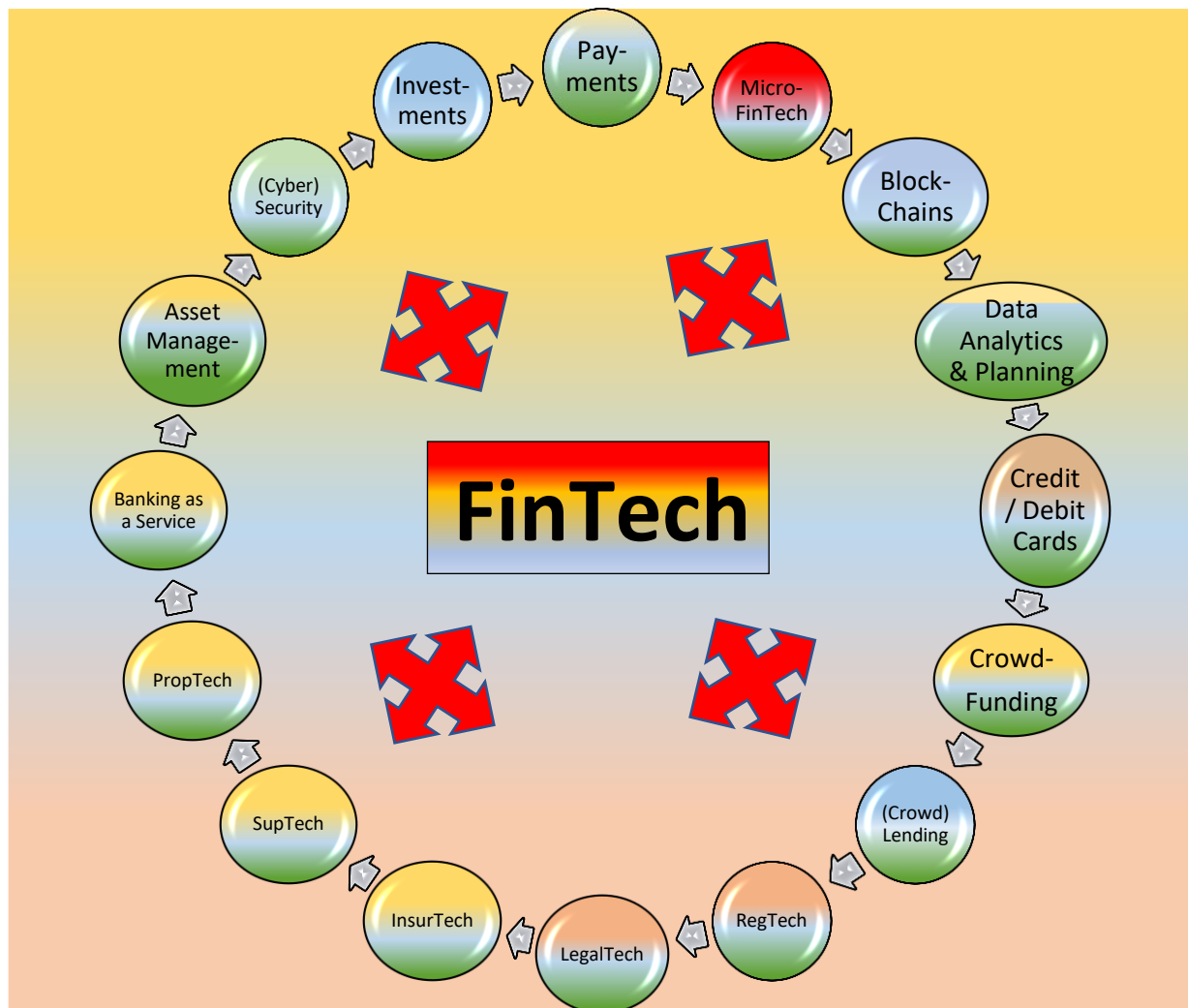
Figure 2. FinTech taxonomy. Source: adapted from [10].

At work in our times, three aspects of the FinTech Revolution have been suggested by Gomber et al. [11]: technology innovation, process distribution, and services transformation. Furthermore, some scholars (e.g., [12]) consider that the increasing focus on the FinTech sector is a global phenomenon as the mass emergence of new, non-bank players and start-ups can be observed in both developed and developing markets.

Despite the rising wave of FinTech and its aggressiveness in taking place in the global financial and banking system, traditional banks have not yet exhausted the possibilities for improvements [13]. According to Gulamhuseinwala et al. [14], FinTech products—financial services developed by non-bank, online companies—offer alternative ways of accessing a variety of services, from money transfers to financial planning. However, the financial services sector is in the nascent stage of digital disruption [15,16] as its main functions are the same today as they were yesterday—people use financial services to exchange money, save or invest, finance, or insure against risk.

On the other hand, the connection between finance and technology is producing a collaborative spirit in both sectors that is blurring the traditional business lines [17]. Thus, FinTech covers digital innovations and technology-enabled business model innovations in the financial sector [7,18]. Such innovations can disrupt existing industry structures and facilitate strategic disintermediation (e.g., through decentralized blockchains used with cryptocurrencies), and democratizing access to financial services, but also create significant privacy, regulatory, and law enforcement challenges [19]. For instance, regulators are facing new challenges which involve ensuring a level playing field for the different players and

protecting users [20]. Tight regulation is typical in the financial industry (as mushrooming RegTechs or SupTechs evidence) and what works in Spain is most likely applicable within the EU.

In summary, although the world of finance, in particular the banking sector, has proven to be of outstanding importance in the daily lives of people around the globe [21], three suggested external factors are driving FinTech adoption and continued use [22]: cost savings, customer friendliness, and ease of access. Information technology (IT) is the magic word behind these three forces.

Concerning insurance technology (**InsurTech**), the internet and related advances in information technology significantly affect financial services, in general, and insurance markets and institutions, in particular [23]. Coupled with other important trends such as globalization and regulatory reforms, these changes force far-reaching changes upon the insurance industry and make it more competitive. The modern insurance business, including developing countries, is associated with the introduction of innovations [24]. Moreover, insurance companies have some of the highest overhead costs, which often are transferred to customers as premiums for insurance products [25]. Whereas companies are adopting digital innovation to reduce expenses by optimizing their operational functions, not all are ready for the digital transformation journey, which risks their routine existence.

However, the insurance process is still quite tiring and tiresome with numerous inefficiencies [26]. To put an end to this, InsurTech startups intend to use disruptive technologies such as big data, the internet of things (IoT), technology mobile, artificial intelligence (AI), and data validating blockchain. In effect, insurance providers intend to use all these technologies to help them add value to the consumer and build loyalty from the customer to the brand. In addition, InsurTech startups aim to offer information to the consumer about the risks of being able to create customized insurance [27], and exploit smart contracts.

Emerging economies with a growing middle class and low insurance penetration rates may present exceptional opportunities over more mature economies. Some of them, including highly populated India, Singapore, Hong Kong, the United Arab Emirates (UAE), and many others, are proactively encouraging InsurTech ecosystems.

Bernardino [28] points out that the insurance sector is facing many challenges whilst the rapidly changing business environment also provides several opportunities. As insurers, regulators and supervisors navigate the digital revolution, the challenges of cyber risk and corresponding opportunities of cyber insurance, the risks associated with a prolonged low yield environment, and the opportunities of taking a stewardship approach to sustainable finance, it is essential that policyholders' interests remain a priority. After all these reflections, by considering the rapid evolution and penetration of technology in the financial sector in general, and more specifically in the insurance sector, FinTech and InsurTech are destined to affect the scope and the implementation of applicable regulation [29].

According to Gramegna and Giudici [30], Insurtech, which is based on the application of AI methods to (big) data retrieved from users' engagement via smartphones, can close the gap between non-life insurance providers and consumers, thereby improving the protection and resilience of our societies. The advantage of using AI applications is, in a nutshell, the capability for insurance companies to better understand consumer needs, listen to their preferences, as expressed by smartphone-generated data, and the possibility for insurance consumers to receive insurance coverage that is well suited to their needs. AI fosters self-fulfilling improvements, with scalable opportunities.

Additionally, Vargas [31] claims that the irruption of technology in an industry as traditional as insurance brings significant challenges for insurers, but it also represents great opportunities for innovation and the development of business models based on customer needs. Directly linked to the topic of big data, AI is a technology that has great potential in insurance, particularly in claims management and fraud detection [32]. Blockchain's use in insurance is also, reportedly, constantly growing and therefore showing great potential in the initial stage, in commercial lines, in the reinsurance business, and intra-group

transactions. Peer-to-peer (P2P) insurance arguably includes a business innovation stronger than the technological one, mainly digital P2P platforms.

In synthesis, InsurTech innovation can help stitch together capabilities across the insurance value chain, so carriers are better able to meet the needs of consumers, agents, and brokers [33].

Finally, **PropTech** is a generic term referring to property technologies in the real estate industry, traditionally a slow-moving asset class [34]. Data-driven markets are often characterized by a winner-takes-all competition between firms that offer platform business models centrally focused on providing digital services for users, who pay in providing more user data. Real estate is, once more, not known as an industry that readily embraces change [35]. The nature of the asset class, which comprises large heterogeneous assets traded in a large private market, is perhaps a good reason for this. Homes can be too much of a part of a private portfolio to take risks with the process by which they are traded, held, or valued. In current times, we are witnessing a battle for market share between traditional advisors and a discernible second wave of technology-based innovation. As [36] states, "thousands of extremely clever people backed by billions of dollars of often expert investment are working very hard to change the way real estate is traded, used, and operated. It would be surprising, to say the least, if this burst of activity—let us call it PropTech 2.0—does not lead to some significant change. There is beyond any doubt that many PropTech firms will fail, and a lot of money will be lost, but there will be some very successful survivors who will in time have a radical impact on what has been a slow-moving, conservative industry".

Despite being generally slow to embrace change, the real estate industry can no longer shut itself off from fundamental technological innovations [37]. Although individual areas such as the housing industry have so far been spared by disruptive business models, companies such as Zillow, Airbnb, and WeWork prove that the impact of such business models can be huge. Different market players will need to address the issues in their way. However, these developments challenge the real estate establishment and may force real-estate agents to look for other ways to add value to the consumer [38] that could otherwise look for disintermediated value chains, where digital platforms directly connect sellers and buyers. Information technology may, in turn, provide a means (e.g., data visualization, broadband telecommunications, interactive communications, dispersion of jobs and work, relationship marketing, and use of intelligent agents) to make this possible.

3. Materials and Methods

3.1. Sample and Data

Consistently with the research question, a questionnaire of 21 items (see Appendix A) was administered to all partners of the Spanish Association of FinTech, InsurTech and, PropTech (AEFI) which currently has 186 members. As the **data collection** was online, the questionnaire was designed by considering the following **steps**:

1. The **potential participants** in the research were all members of AEFI.
2. The technique used in this research was **probabilistic sampling** because all members of the population had the same probability of being selected.
3. **No segmentation** has been applied in this research.
4. The research was conducted during the **second half of the year 2021**, and it was necessary to submit the questionnaire several times to obtain a significant number of potential respondents.
5. The questionnaires were administered by using the well-known platform **Google Forms**. To do this, the questionnaire was adapted to the internet in the following way:

    (a) It was concise.
    (b) It avoided duplicate questions.
    (c) All possible alternatives were included among the answers.
    (d) The time to answer the questionnaire was moderate.
    (e) It was easily accessible from an electronic device.

6. The **privacy** of personal data was guaranteed.
7. The obtained data were **shared** with AEFI.

As a result, the number of valid responses was 55 (29.57% of associated companies), mostly provided by FinTech and InsurTech companies with head offices in Madrid (45), Barcelona (3), Valencia (2), Zaragoza (1), Munich (1), and Colombia (3).

Finally, the questionnaire was not previously validated due to the small size of the population. Therefore the questionnaire was based on that of KPMG and Funcas [39].

3.2. Methodology

The analysis follows the so-called multinomial logit regression, the methodology developed by Agresti [40,41], Agresti and Franklin [42], and Greene [43]. This method is a known extension of the binary logit. It starts from n independent observations with *p* explanatory variables, where the qualitative response variable has *k* categories. To construct the logits in the multinomial case, one of the categories must be considered the base level and all logits must be constructed relatively to it. Any category can be ta n as the base level. Since there is no order category, *k* can bejthen as the base level. Let π_j denote the multinomial probability of an observation falling in the *j*-th category. The relationship between this probability and the *p* explanatory variables, $X_1, X_2, \ldots, X_p$, the multiple logistic regression model is defined by:

$$\log \frac{\pi_j(x_i)}{\pi_k(x_i)} = \alpha_{0i} + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \cdots + \beta_{pj}x_{pi},$$

where *j* = 1, 2, *k* − 1 and i = 1, 2, ... , n. As the sum of all π is 1, one has:

$$\log \pi_j(x_i) = \frac{\exp(\alpha_{0i} + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \cdots + \beta_{pj}x_{pi})}{1 + \sum\limits_{k=1}^{p-1} \exp(\alpha_{0i} + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \cdots + \beta_{pj}x_{pi})}.$$

For each *j* = 1, 2, ... , *k* − 1, the model parameters are estimated by the method of maximum likelihood. As indicated, in the multinomial logit regression model, the estimate for the parameters can be identified in comparison to a baseline category. If x denotes a matrix or a vector, let $\pi_j(x) = P(Y = j|x)$ at a given setting x of explanatory variables, where obviously $\sum\limits_{j=1}^{k-1} \pi_j(x) = 1$. Assume that *k* counts all the categories of Y, with probabilities, $\pi_1(x), \pi_2(x), \ldots, \pi_k(x)$. In this context, logit models pair each response category with a baseline category:

$$\log \frac{\pi_j(x)}{\pi_k(x)} = \alpha_j + \beta_j'x,$$

where *j* = 1, 2, ... , *k* − 1, simultaneously describes the effects of x on these *k* − 1 logits. As the effects vary according to the response paired with the baseline, these *k* − 1 equations determine parameters for logits with other pairs of response categories. Finally, the Pearson Chi-square statistic χ^2 and the likelihood ratio Chi-square statistic G^2 goodness-of-fit statistics provide a model check when data are not sparse [42].

3.3. Variables

To justify the variables, we are going to use in our study, Figure 3 shows the number of companies in the sample arguing each reason why sustainable finance is relevant. Observe that the items "Development of B2B new products and services" and "Portfolio management based on ESG criteria" compose 52.73% of responses. On the other hand, the item "Development of B2C new products d services" represents 20% of responses. These percentages coincide with the global figures, 52% and 34%, corresponding to B2B and B2C operations, respectively [39].
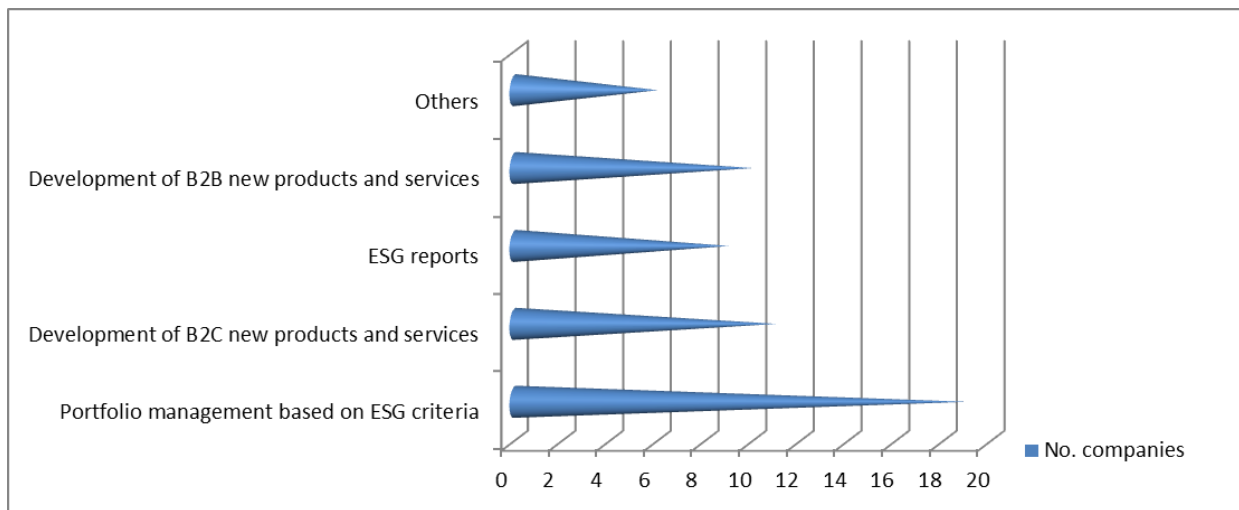
Figure 3. Number of companies arguing each reason for the relevance of sustainable finance. Source: own elaboration.

Most specialists on the issue of FinTech support the idea that the worry about sustainability is related to the fact that most FinTechs have reversed their strategy of providing services to final consumers (B2C) to provide financial services which satisfy the needs of other companies (B2B). In effect, as formerly indicated, the business model of Spanish FinTechs is changing from B2C to B2B products and services. Carbó et al. [44,45] show that most Spanish FinTechs are focused on offering their financial solutions to other firms (B2B). Thus, their business model is composed of 56.48% of B2B solutions (by obtaining revenues through commissions), 33.55 % B2C products and services, and 9.97% of mixed B2B and B2C. This is because B2B startups are more appreciated by Banks, whilst B2C are considered competitors. More FinTech startups are considered the main disruptors, but most of them have changed to B2B models to provide platforms to financial institutions [46].

Considering the closeness of FinTechs to SDGs and ESG criteria, it is logical that, in this paper, we wonder whether this change in the business model is due to the fulfillment or not of sustainability principles. In this way, item #15 of the survey offers four possible answers:

1. Sustainable products and/or services for the consumer.
2. Environmental, social, and good governance reports.
3. Products related to environmental, social, and good governance criteria.
4. Sustainable products and/or services for the company.
5. Other.

The first and fourth can be identified as B2C and B2B products and services, respectively. Observe also that the results of the survey have been reinforced by the options of the immediately previous item (#14) which serves as validation. In effect, the possible answers to item #14 are the following:

- Portfolio management based on environmental, social, and good governance criteria.
- Development of new products or services for the consumer.
- Improve reputation.
- The development of new products or services.
- Others.

Observe that these answers correspond to those of item #15 and that one of the possible answers is "Portfolio management based on environmental, social, and good governance criteria" and indeed these portfolios are designed mostly to be offered to other companies.

Therefore, the null hypothesis to be tested is the following:

Hypothesis: *"The business model (B2B or B2C) followed by the Spanish Companies of FinTech, InsurTech, and PropTech is related to the existence of Sustainability plans in such companies".*

To do this, we are going to use the variables in the questionnaire which are related to sustainability. Therefore, in our study, we will consider the following ordinal variables:

- X_1: "Implementation of sustainability plans or sustainable measures" (corresponds to item #7). Its possible values are 0 (if the answer is "No") and 1 (if the answer is "Yes").
- X_2: "Existence of a sustainability department in the company" (corresponds to item #9(d)). Its possible values are 0 (if the answer is "No"), 2 (if the answer is "Yes"), and 1 (if the answer is "Don't know/No answer").
- X_3: "Relevance and implementation of the future European regulation" (corresponds to item #18). Its possible values are 0 (if the answer is "No level of relevance" or "Long term: more than 5 years"), 1 (if the answer is "A low level of relevance" or "Medium/high term: between 3 and 5 years"), 2 (if the answer is "A good level of relevance" or "Medium/low term: between 1 and 3 years"), and 3 (if the answer is "A high level of relevance" or "Short term: less than 1 year").
- X_4: "Perception about the regulation of the European Union on Sustainable Finance" (corresponds to item #19). Its possible values are 0 (if the answer is "It is an expense/cost"), 2 (if the answer is "It is an opportunity"), and 1 (if the answer is "Don't know/No answer").
- Y: "Identification of the business model (B2B or B2C) followed by the FinTech company" (corresponds to item #15). Its possible values are 0 (if the answer is "Sustainable products and/or services for the consumer"), 1 (if the answer is "Environmental, social and good governance reports"), 2 (if the answer is "Products related to environmental, social and good governance criteria" or "Other"), and 3 (if the answer is "Sustainable products and/or services for the company"). This dependent variable reflects the degree of the business model (B2B or B2C) of the service provider among the companies in the sample.

A summary of the just-defined variables, divided into explanatory and explained, can be seen in Table 1.

Table 1. Defining the variables to be considered in the analysis. Source: own elaboration.

Explained Variable	
Y	Identification of the business model (B2B or B2C) followed by the FinTech company
Explanatory Variables	
X_1	Implementation of sustainability plans or sustainable measures
X_2	Existence of a sustainability department in the company
X_3	Relevance and implementation of the future European regulation
X_4	Perception of the regulation European Union on Sustainable Finance

By applying the methodology described in Section 3.2, we must test the following null and alternative hypotheses:

$$\begin{cases} H_0 : \log(\text{odds}) = b_0 \\ H_1 : \log(\text{odds}) = b_0 + b_1 X_1 + \cdots + b_p X_p \end{cases}$$

where, at least, a coefficient b_k is different from zero.

4. Results

4.1. Descriptive Results

Table 2 displays the current position of respondents in the company.

Table 2. Distribution of the questionnaire respondents. Source: own elaboration.

Founder	CEO	CFO	CTO	CCO	Other
14	9	1	1	1	29

Concerning the oldness of the companies participating in the analysis, we must highlight that most of them were created in 2013 and 2017. Figure 4 represents the number of companies created each year from 2003 to 2019.
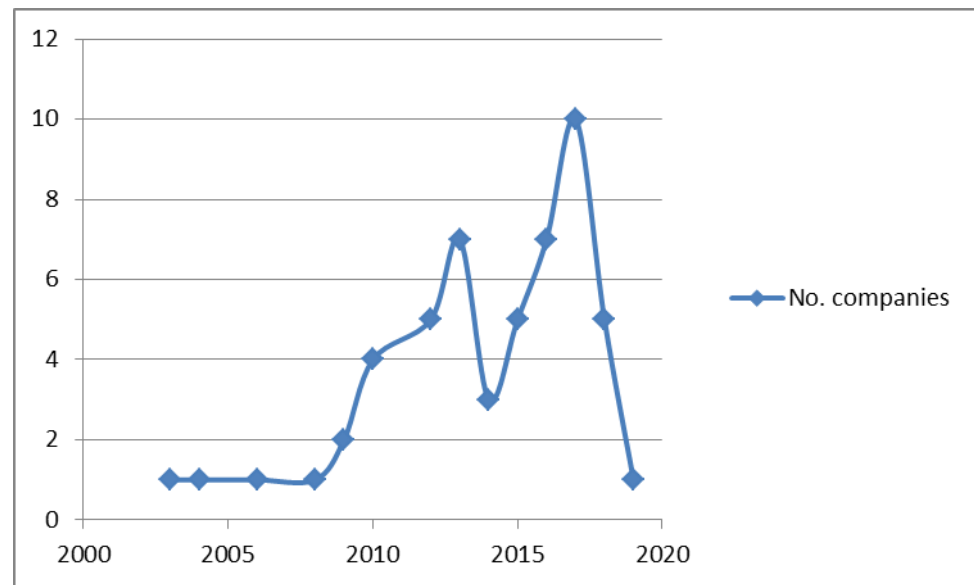
Figure 4. Number of companies according to their year of creation. Source: own elaboration.

Figure 5 shows that the size of these companies (measured by the number of employees) is extreme (mostly with less than 10 and more than 100 employees).

Figure 5. Size of the companies participating in the study. Source: own elaboration.

Figure 6 exhibits the number of companies according to different percentages of the presence of women in such companies. The positive skewness of this distribution shows a higher presence of men in the companies involved in the analysis.
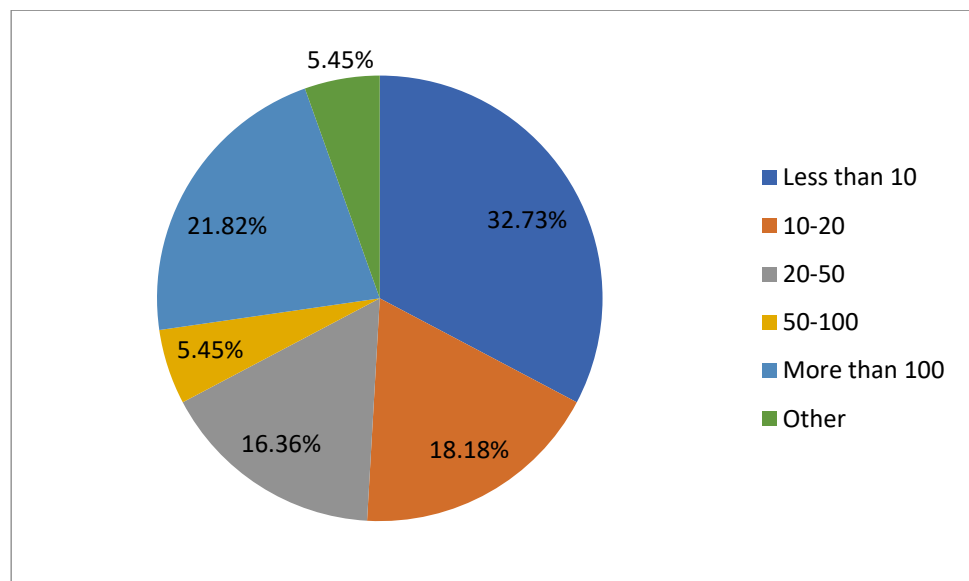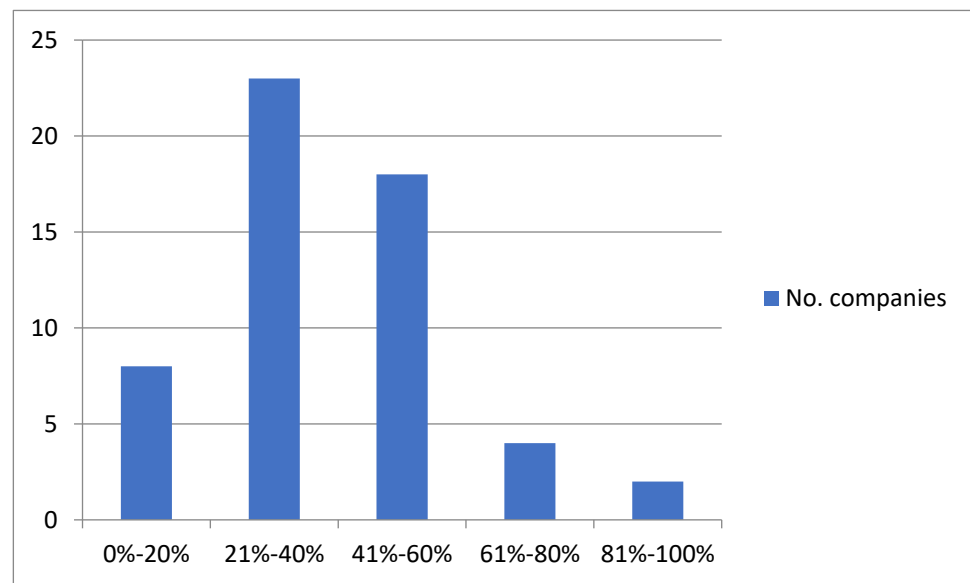
Figure 6. Number of companies according to the presence of women (in %). Source: own elaboration.

Finally, Figure 7 displays the distribution of business areas of the companies included in the sample.
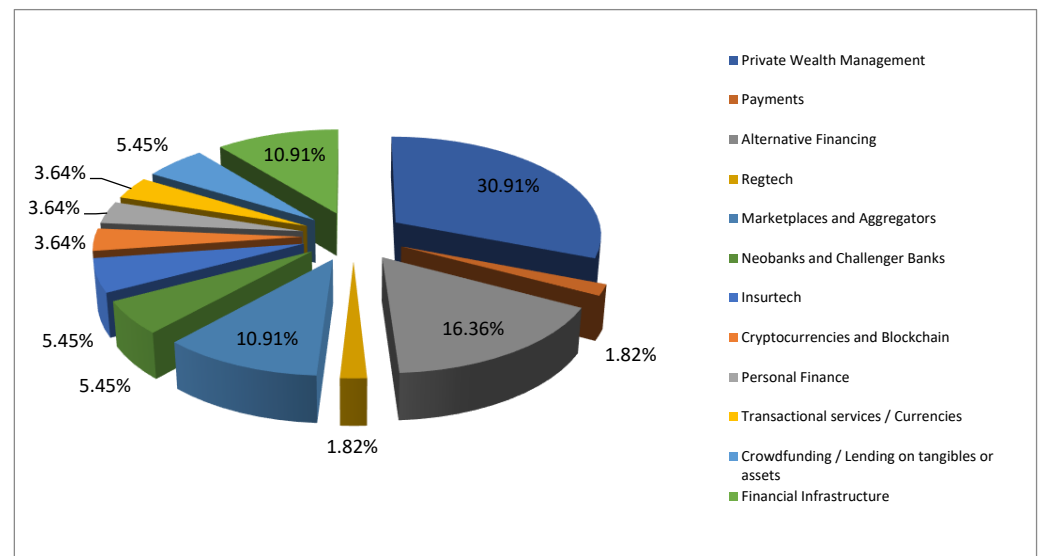
Figure 7. Business areas of respondents. Source: own elaboration.

4.2. Results from the Multinomial Logit Regression

In this paper, multinomial logistic regression was performed to create a model of the relationship between the predictor variables ("Implementation of sustainability plans or sustainable measures", "Existence of a sustainability department in the company", "Relevance and implementation of the future European regulation", and "Perception about the regulation of the European Union on Sustainable Finance") and membership in the four groups ("Sustainable B2C products and services", "ESG reports", "Portfolio management based on ESG criteria", and "Sustainable B2B products and services"). The fit between the model containing only the intercept and data improved with the addition of the predictor variables: χ^2 (12, N = 55) = 15.01, Nagelkerke R^2 = 0.24.

In this model, the coefficients relating categories 1, 2 and 3 to 0, are shown in Tables 3–5, respectively.

Table 3. Coefficients relating category 1 to category 0. Source: own elaboration.

Odds $\frac{P(Y=1)}{P(Y=0)}$	Coefficient	S.E.	z-stat	Lower Bound C.I.	Upper Bound C.I.	Exp(b_k)	p-Value
b_0	−1.3150	1.4917	−0.8815	−4.2388	1.6087	0.2685	0.3780
X_1	0.8424	1.4075	0.5985	−1.9162	3.6010	2.3219	0.5495
X_2	0.1107	0.7297	0.1518	−1.3194	1.5409	1.1171	0.8794
X_3	−0.1926	0.6716	−0.2868	−1.5089	1.1237	0.8248	0.7743
X_4	−0.4724	0.7556	−0.6252	−1.9533	1.0085	0.6235	0.5318

Table 4. Coefficients relating category 2 to category 0. Source: own elaboration.

Odds $\frac{P(Y=2)}{P(Y=0)}$	Coefficient	S.E.	z-stat	Lower Bound C.I.	Upper Bound C.I.	Exp(b_k)	p-Value
b_0	−4.0707	1.9357	−1.7268	−7.8646	−0.2768	0.01707	0.03547 (*)
X_1	−1.2328	1.0011	0.3139	−3.1949	0.7294	0.2915	0.2182
X_2	1.1891	0.5863	1.1043	0.0400	2.3381	3.2840	0.04254 (*)
X_3	0.9979	0.6358	1.2119	−0.2482	2.2440	2.7126	0.1165
X_4	0.7538	0.6134	0.5718	−0.4483	1.9560	2.1251	0.2191

* Significant at 5% level. S.E.: standard error.

Table 5. Coefficients relating category 3 to category 0. Source: own elaboration.

Odds $\frac{P(Y=3)}{P(Y=0)}$	Coefficient	S.E.	z-stat	Lower Bound C.I.	Upper Bound C.I.	Exp(b_k)	p-Value
b_0	−2.3398	1.3550	−1.7268	−4.9955	0.3159	0.09635	0.08420 (**)
X_1	0.2765	0.8807	0.3139	−1.4497	2.0027	1.3185	0.7536
X_2	0.5115	0.4632	1.1043	−0.3964	1.4194	1.6679	0.2695
X_3	0.6145	0.5071	1.2119	−0.3793	1.6084	1.8488	0.2255
X_4	0.2875	0.5028	0.5718	−0.6980	1.2730	1.3331	0.5675

** Significant at 10% level. S.E.: standard error.

However, the coefficients relating categories 1 and 3 to category 0 are not significant (Tables 3 and 5), whereby their interpretation has been omitted. The information contained in Table 4 can be interpreted as follows:

- When all the values of predictors (X_j) are zero, the odds of 2 in comparison to 0 are 0.01707.
- One-unit increase in X_1 will decrease the odds of 2 in comparison to 0 by 70.9% (i.e., the odds will be multiplied by 0.2915).
- One-unit increase in X_2 will increase the odds of 2 in comparison to 0 by 228.4% (i.e., the odds will be multiplied by 3.2840).
- Etc.

The following three equations summarize the outputs of the applied model:

$$t_1 = -2.3398 + 0.2765X_1 + 0.5115X_2 + 0.6145X_3 + 0.2875X_4$$

$$t_2 = -4.0707 - 1.2328X_1 + 1.1891X_2 + 0.9979X_3 + 0.7538X_4$$

$$t_3 = -1.3150 + 0.8424X_1 + 0.1107X_2 - 0.1926X_3 - 0.4724X_4$$

and,

where the model equation for modality j is:

$$t_j = \log(P(\text{category} = j)/P(\text{category} = 0)).$$

The symmetric matrix in Table 6 reflects the correlation between the explaining variables used in our model:

Table 6. Matrix of correlation of the independent variables. Source: own elaboration.

	X_1	X_2	X_3	X_4
X_1	1.0000	0.5116	−0.0364	0.0087
X_2	0.5116	1.0000	0.0847	0.0868
X_3	−0.0364	0.0847	1.0000	0.2249
X_4	0.0087	0.0868	0.2249	1.0000

In the estimated parameters, the following independent variables X_1, X_3 and X_4 are not significant as predictors for Y. On the other hand, it appears that only y X_2 is consistently statistically significant at 5% significance level. Thus, a growing demand from other companies (B2B operations) can be identified with the existence of sustainability departments. This conclusion can be graphically represented in Figure 8.
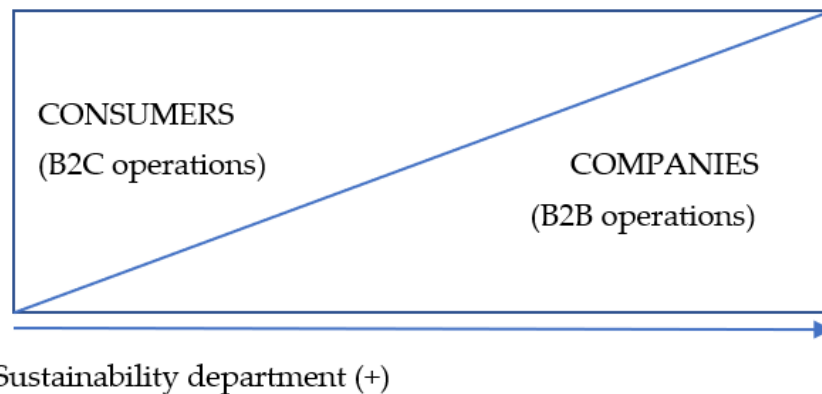

Figure 8. Relationship between the business model (B2B or B2C) of FinTechs and the existence of sustainability departments (+ and − mean more and less departments, respectively) in such companies. Source: own elaboration.

In our study, a negative coefficient indicates that the corresponding variable is associated with a probability of not having a department of sustainability, greater than the probability of having such a department. On the other hand, a positive coefficient indicates that the involved variable is associated with a probability of having a department of sustainability, lower than the probability of not having such a department. The results show that a one-unit increase in X_2 implies a greater probability of having a department of sustainability. As indicated, only one variable is significant in both categories at a 5% significance level: X_2.

As the interpretation of odds and log odds is not intuitive, it is more interesting to determine the effects of each covariate on the selection probabilities. In effect, by calculating the inverse logit, one has:

$$p_1 = \frac{1}{1 + e^{t_2} + \cdots + e^{t_k}}$$

$$p_2 = \frac{e^{t_2}}{1 + e^{t_2} + \cdots + e^{t_k}}$$

and

$$p_k = \frac{e^{t_k}}{1 + e^{t_2} + \cdots + e^{t_k}}$$

The intercept has an easy interpretation in terms of probability (instead of odds) since each intercept b_0 in the logit regression can be interpreted as the result of a value 0 for all predictors in the model (see Table 7). In our case:

Table 7. Interpreting intercepts in terms of probability. Source: own elaboration.

Regression	b_0	*p*-Value	e^{b_0}	p_h
0 related to 0	0.0000 (*)	0.0000	1.0000	0.7236
1 related to 0	−1.3150	0.3780	0.2685	0.1943
2 related to 0	−4.0707 (*)	0.03547	0.01707	0.0124
3 related to 0	−2.3398	0.08420	0.09635	0.0697

* Significant at 5% level.

Considering the fact that only two intercepts are significant, we can state that, in case of there being no awareness regarding sustainability in a FinTech company, the probability of not changing its offer from B2C is 72.36%, and the probability of changing its offer from B2C to "Products related to environmental, social and good governance criteria" or "Other products and services" is very small (namely, 1.24%).

5. Discussion

Sustainability is a multi-faceted concept, with socioeconomic and environmental dimensions. The economic aspect is the one closest to the aim and research question of this study and is the basic pillar of the other sustainability concerns (no money, no party). FinTech's sustainability is also closely linked to ESG drivers and sustainable development goals, as illustrated in Figure 9.

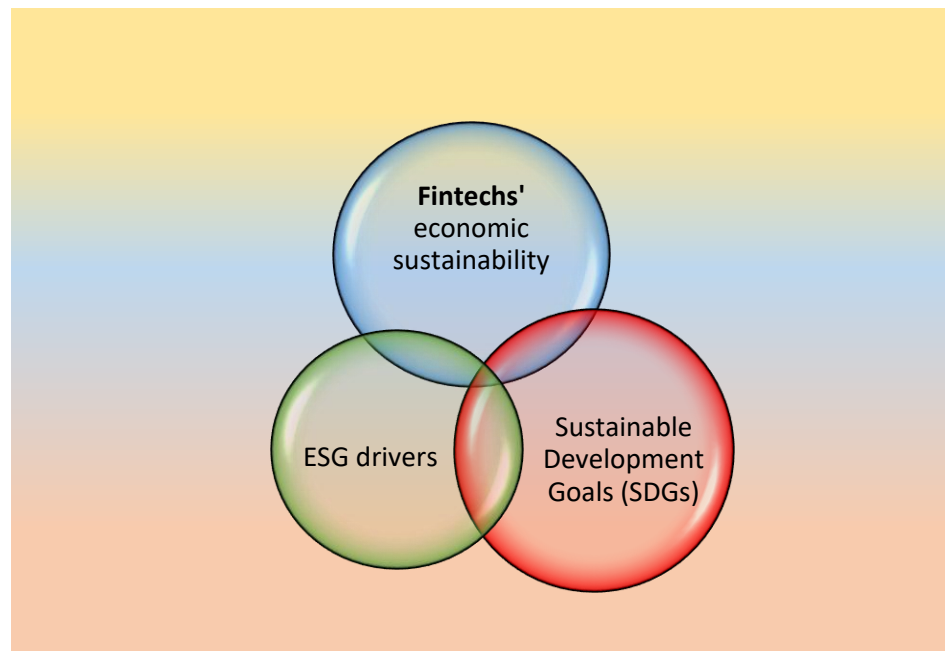**Figure 9.** Relationship between FinTech's economic sustainability and ESG/SDGs. Source: own elaboration.

FinTech can help companies to evaluate and reduce their environmental impact through technologies such as advanced data analytics, blockchain, and artificial intelligence. Thus, the European Commission and financial regulators have conveyed the importance of the role that FinTech, PropTech, and InsurTech must play [47].

Meeting ESG criteria is an increasingly important goal for companies which both investors and consumers support [48]. According to Refinitiv data [49], investor interest in sustainable assets increased by 34% in 2020, and 61% when it came to millennial investors.

Some studies point out that "66% of global consumers" (and 73% of millennials) "are willing to pay more for environmentally friendly products" [50]. There has also been a substantial movement within demographic profiles. Millennials are the ones who have changed the most as they have become greener: 58% of those traditionally considered a millennial—27 to 32-year-olds. Millennials want to know not just how much return an investment will make, but how it will make that return and at what cost to people, the planet, or communities. For instance, this could be understood as an opportunity for a process of change that promotes more sustainable habits from Spanish consumers' demand so far [51].

As discussed, our results support the idea that green startups are characterized by more efficient, responsible, and less expensive production processes. For example, this type of company is not only limited to the FinTech sector, although this is the most popular. They can also be found in the construction industry, ecotourism, renewable energies, and the technology sector, among others [52].

Some securities market supervisory bodies have dealt with the need and convenience of a sustainability commission in listed companies [53]. In the current environment, compliance sustainability plans are crucial and the existence of a sustainability department will also be a must in the short term to improve, grow and increase our present consumer demand, both in FinTech, InsurTech, and PropTech companies [54,55].

The results of our survey are illustrative examples of the clear opportunity for companies in the FinTech/InsurTech/PropTech sector to pay attention to the interests, opinions, and wishes of investors to implement regulations regarding data protection, accessibility, discrimination, and financial exclusion [50].

Finally, for many consumers, there are certain legal factors, such as a sandbox (a regulatory test space in which FinTechs and InsurTechs are in the initial stages of innovative projects) which can help sustainable departments in terms of efficiency.

Many empirical studies on the economic aspects of FinTechs have pointed out a change in the business strategy of these companies, going from B2C to B2B providers [39]. Very recently, the literature and the market analysis indicate that green FinTech has an impact, in effect, along the whole value chain of financial services covering customer-to-customer (C2C), business-to-customer (B2C), and business-to-business (B2B) services [56]. These studies related to B2B and B2C suggest that, in Switzerland, most of the startups provide B2B services, which primarily provide investment solutions to the clients. Additionally, in the B2C market, startups also supply investment solutions, and the C2C area is only represented by advisory and investment solution provider.

From an empirical point of view, Campanella et al. [57] observed the importance that Fintech providers have a green reputation since it enhances the consumers' trust and satisfaction with the offered internet banking services. These scholars encourage the financial institutions to promote sustainable development and green strategies in their planning as concern for the environment and sustainability affects consumers, who increasingly consider non-financial attributes in their investments, such as environmental, social, and governance criteria.

Most studied FinTechs target other companies, a process characterized as B2B [58]. However, other B2C FinTechs address individuals. There is also a small group of FinTechs which serves both targets, which were classified as B2B2C. They also can be identified as actors from the service-dominant (S-D) logic perspective (an alternative theoretical framework in behavioral economics for explaining value creation, through the exchange, among configurations of actors).

The trends that are likely to develop in the future, and how it will become ever more important for incumbent financial services providers to partner with FinTechs to offer tailored solutions, are described in [59]. Consequently, the authors discuss how

consolidation within the B2B FinTech space is expected to continue, while the emergence of tech giants in the financial services space represents the potential for a FinTech future. Additionally, the FinTech companies that are more likely to succeed are those that target existing markets with growth potential, such as credit markets [60].

On the other hand, [61] point out that, among the factors that limit the benefits of sustainability programs, some barriers can be considered, such as the disconnection of the sustainability department from the rest of the organization and the too-little influence of the sustainability department inside the organization.

However, in this study, we wonder if this change of strategy is due to the sustainability strategies implemented in the FinTechs, InsurTechs, and PropTechs. To do this, we have proposed a multiple regression between the business orientation of these companies and all sustainability-related variables analyzed in a sample administered to all members of the AEFI. After several iterations, the regression model only considers significant (at a 5% significance level) the existence of a department of sustainability in the company in such a way that having this kind of department increases the odds of the company being B2B-oriented.

The above consideration that the FinTechs should promote the creation of sustainability departments (as a reverse of the business models of FinTechs can be identified with the existence of such departments) is related to the world trend of moving towards sustainable economic models which by 2030 could create economic opportunities worth 12 trillion USD a year [62].

6. Conclusions

In their beginnings, FinTech companies were more devoted to offer new products and services to final consumers (B2C operations). However, some research in this field has pointed out the reversal of this tendency towards new products and services to other companies (B2B operations). In this paper, we have considered whether this statement holds for Spanish FinTechs and, in the affirmative case, whether this change is associated with the existence of certain sustainability plans in the FinTech industry. The empirical study shows that this change is related to the existence of sustainability departments in the companies included in the sample. In effect, this dichotomous variable is significant at the 5% level whilst the other variables involved in the study are irrelevant. In effect, after reviewing the main features of the Spanish FinTech, PropTech and InsurTech industry, this study has shown that growing demand for FinTech services from other companies (B2B operations) can be identified with the existence of sustainability departments in FinTech companies. To do this, we have administered a questionnaire to the 186 companies belonging to the Spanish Association of FinTech, InsurTech and PropTech, by obtaining 55 valid answers. The methodology employed in this paper has been the multinomial logit regression since the explained and all exploratory variables are categorical.

ESG-compliant FinTechs find it easier to attract new customers and fresh capital from green investors. Current concerns about environmental issues have led to many new trends in technology and financial management [63]. The market value of FinTechs is positively assessed [64].

Generalization of these conclusions beyond the Spanish market [65,66] fosters geographical scalability of sustainability strategies, with an impact on cross-border initiatives, especially within a homogeneous financial market (such as the EU).

FinTechs may strongly contribute, with their innovative features, to aligning financial intermediaries (a conservative Moloch) to ESG-compliant SDGs, pursuing digitally sustainable patterns.

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Abbreviations

CEO	Chief Executive Officer
CFO	Chief Financial Officer
CTO	Chief Technical Officer
CCO	Chief Customer Officer
B2B	Electronic commerce among companies through the internet
B2C	Electronic commerce with the final consumer through the internet
AEFI	Electronic commerce with the final consumer through the internet
AEFI	Asociación Española de FinTech, InsurTech y PropTech

Appendix A

A study of the FinTech, InsurTech, and PropTech sectors and the evolution of their projects in the Spanish market. The challenges and opportunities for the FinTech sector in a constantly changing socio-economic environment.

Purpose:

The purpose of this study is to analyze the FinTech, InsurTech, and PropTech sectors in Spain based on the opinions of its main actors to try to detect the foreseeable challenges and opportunities. It will also propose improvements to increase sustainable innovative activity and beneficial knowledge transfer to both producers and consumers in the FinTech, InsurTech, and PropTech sectors in Spain.

(1) Current position in the company

- ○ Founder
- ○ CEO
- ○ CFO
- ○ CTO
- ○ CCO
- ○ Other

(2) Year of creation of your company Your answer_____

(3) Location of the company Your answer_____

(4) Workforce—Number of Employees

- ○ <10 employees
- ○ 10–20
- ○ 20–50
- ○ 50–100
- ○ >100
- ○ Other:

(5) Percentage of female and male employees Your answer_____

(6) Your business area

- ○ Private Wealth Management
- ○ Payments
- ○ Alternative Financing

    ○   Regtech
    ○   Marketplaces and Aggregators
    ○   Neobanks and Challenger Banks
    ○   Insurtech
    ○   Cryptocurrencies and Blockchain
    ○   Online identification of clients
    ○   Personal Finance
    ○   Transactional services/Currencies
    ○   Crowdfunding/Lending on tangibles or assets
    ○   Financial Infrastructure

(7) Has your company made sustainability plans or adopted sustainability measures?

    ○   Yes
    ○   No

(8) If you have answered "Yes", go to question (9). If you answered "No", answer the following question. Why not?

    ○   Because you plan to take measures in the future
    ○   Because your company lacks the resources or experience
    ○   Because you believe they are not profitable for your company
    ○   Because they do not have the support of the headquarters

(9) Has your company adopted actions or measures in the following business areas?

  (a) Corporate strategy:

    ○   Yes
    ○   No
    ○   Don't know/no answer

  (b) Product development:

    ○   Yes
    ○   No
    ○   Don't know/no answer

  (c) Technology:

    ○   Yes
    ○   No
    ○   Don't know/no answer

  (d) Organizational (Do you have a sustainability department?):

    ○   Yes
    ○   No
    ○   Don't know/No answer

(10) If you have answered "No" in any of the previous sections, please answer the following question. If you have answered "Yes" in all the previous sections, go to question (11). Are actions or measures planned in the following areas?

  (a) Corporate strategy:

    ○   Yes
    ○   No
    ○   Don't know/no answer

  (b) Product development:

    ○   Yes
    ○   No
    ○   Don't know/no answer

  (c) Technology:

    ○   Yes
    ○   No

○   Don't know/no answer

(d)   Organizational (Do you have a sustainability department?):

    ○   Yes

    ○   No

    ○   Don't know/No answer

(11) List three of the Sustainable Development Goals (SDGs) that are easy for your company to achieve Your answer_____

(12) What advantages do you hope to achieve by being "sustainable"?

    ○   More benefits

    ○   More customers

    ○   More CSR

    ○   Greater commitment

    ○   Other_____

(13) The most important reasons for the development of sustainable finance are:

    ○   Increasing demand from customers for sustainable products or services

    ○   Contribution to the sustainable development of Spain

    ○   New European Union regulation in the area of sustainable finance

    ○   Increase additional income

    ○   Competitive differentiation

    ○   Risk management

    ○   Image/marketing

    ○   Reputational improvement

    ○   Defensive strategic moves against competitors

    ○   Other reasons_____

(14) Sustainable finance is relevant for:

    ○   Portfolio management based on environmental, social, and good governance criteria

    ○   Development of new products or services for the consumer

    ○   Improve reputation

    ○   The development of new products or services

    ○   Others

(15) A growing demand from customers has been identified with:

    ○   Sustainable products and/or services for the consumer

    ○   Environmental, social, and good governance reports

    ○   Products related to environmental, social, and good governance criteria

    ○   Sustainable products and/or services for the company

    ○   Other

(16) What economic measures would help protect the current financial eco-system Fintech /Insurtech/Proptech and Legaltech ecosystem?

    ○   Your answer_____

(17) What is the probability that Spain will become the center of sustainable finance in Europe?

    ○   A very low probability

    ○   A low probability

    ○   A good probability

    ○   A high probability

(18) Future European regulation should have the following criteria: Relevance:

    ○   No level of relevance

    ○   A low level of relevance

    ○   A good level of relevance

    ○   A high level of relevance

Implementation:

- ○   Short term: less than 1 year
- ○   Medium/low term: between 1 and 3 years
- ○   Medium/high term: between 3 and 5 years
- ○   Long term: more than 5 years

(19) What is your perception about the regulation European Union on Sustainable Finance:

- ○   It is an opportunity
- ○   It is an expense/cost
- ○   Don't know/No answer

(20) Which of these aspects do you consider the most important in the implementation of the Sandbox?

- ○   Development of innovative solutions
- ○   Promotion of a competitive environment
- ○   Constant legislative updates
- ○   Minimization of risks
- ○   Other:

(21) Have FinTech/InsurTech and PropTech companies gained more prominence during the COVID-19 health crisis? Your answer_____

The information collected in this questionnaire will be confidential and the data will be used in an aggregate way so as not to harm the rights of the participants. The use of this information will be neutral and be only used for academic and investigative purposes. It will also be used in compliance with the EU REGULATION 2016/679 (RGPD) which indicates that the processing of your data is done with the legal and technical guarantees indicated in these regulations.

Your answer_____

References

1. Banco Bilbao Vizcaya Argentaria. 'Fintech', 'Proptech', 'Femtech', 'Edtech' and Other Related Neologisms. Available online: https://www.bbva.com/en/fintech-proptech-femtech-edtech-and-other-related-neologisms/ (accessed on 28 August 2022).
2. Hommel, K.; Bican, P.M. Digital entrepreneurship in finance: Fintechs and funding decision criteria. *Sustainability* **2020**, *12*, 8035. [CrossRef]
3. Ryu, H.-S.; Ko, K.S. Sustainable development of fintech: Focused on uncertainty and perceived quality issues. *Sustainability* **2020**, *12*, 7669. [CrossRef]
4. Stoeckli, E.; Dremel, C.; Uebernickel, F. Exploring characteristics and transformational capabilities of InsurTech innovations to understand insurance value creation in a digital world. *Electron. Mark.* **2018**, *28*, 287–305. [CrossRef]
5. Asociación Española de Fintech e Insurtech (AEFI). Libro Blanco de Insurtech. Available online: https://www.asociacionfintech.es/recursos/libro-blanco-del-insurtech/ (accessed on 28 August 2022).
6. Arner, D.W.; Barberis, J.; Buckley, R.P. The evolution of fintech: A new post-crisis paradigm? *Georget. J. Int. Law* **2016**, *47*, 1271. [CrossRef]
7. Moro-Visconti, R.; Cruz Rambaud, S.; López Pascual, J. Sustainability in fintechs: An explanation through business model scalability and market valuation. *Sustainability* **2020**, *12*, 10316. [CrossRef]
8. Kerényi, Á.; Müller, J. The need for trust and ethics in the digital age—Sunshine and shadows in the fintech world. *Financ. Econ. Rev.* **2019**, *18*, 5–34. [CrossRef]
9. Cortina, J.J.; Schmukler, S.L. *The Fintech Revolution: A Threat to Global Banking*; World Bank: Washington, DC, USA, 2018.
10. Moro-Visconti, R. *MicroFintech. Expanding Financial Inclusion with Cost-Cutting Innovation*; Palgrave Macmillan: Cham, Switzerland, 2021.
11. Gomber, P.; Kauffman, R.; Parker, C.; Weber, B. On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *J. Manag. Inf. Syst.* **2018**, *35*, 220–265. [CrossRef]
12. Kerényi, Á.; Molnár, J. The impact of the fintech phenomenon—Radical change occurs in the financial sector? *Financ. Econ. Rev.* **2017**, *16*, 32–50. [CrossRef]
13. Mackenzie, A. The fintech revolution. *Lond. Bus. Sch. Rev.* **2015**, *26*, 50–53. [CrossRef]
14. Gulamhuseinwala, I.; Bull, T.; Lewis, S. FinTech is gaining traction and young, high-income users are the early adopters. *J. Financ. Perspect.* **2015**, *3*, 1–21.
15. Kashyap, K.M.; Weber, G. How emerging technologies will change financial services. In *The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*; Chishti, S., Barberis, J., Eds.; Wiley: Hoboken, NJ, USA, 2016; pp. 226–228.

16. Basole, R.C.; Patel, S.S. Transformation through unbunding: Visualizing the global fintech ecosystem. *Serv. Sci.* **2018**, *10*, 379–396. [CrossRef]

17. Nienaber, R. Banks need to think collaboration rather than competition. In *The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*; Chishti, S., Barberis, J., Eds.; Wiley: Hoboken, NJ, USA, 2016; pp. 20–21.

18. Philippon, T. *The FinTech Opportunity*; National Bureau of Economic Research: Cambridge, MA, USA, 2019.

19. Cruz Rambaud, S.; Expósito Gázquez, A. A RegTech approach to Fintech sustainability: The case of Spain. *Eur. J. Risk Regul.* **2022**, *13*, 333–349. [CrossRef]

20. Darolles, S. The rise of fintechs and their regulation. *Financ. Stab. Rev.* **2016**, *20*, 85–92.

21. Zavolokina, L.; Schwabe, G.; Dolata, M. Fintechs—What's in a Name? In Proceedings of the 37th Conference on Information Systems, Dublin, Ireland, 11–14 December 2016.

22. Leonga, C.; Tan, B.; Xiao, X.; Tan, F.; Sun, Y. Nurturing a fintech ecosystem. The case of a youth microloan startup in China. *Int. J. Inf. Manag.* **2017**, *37*, 92–97. [CrossRef]

23. Garven, J. On the implications of the internet for insurance markets and institutions. *Risk Manag. Insur. Rev.* **2002**, *5*, 105–116. [CrossRef]

24. Yehorycheva, S.; Fysun, I.; Hudz, T.; Palchuk, O.; Boiko, N. Innovations in the insurance market of a developing country: Case of Ukraine. *Investig. Manag. Financ. Innov.* **2020**, *17*, 175–188. [CrossRef]

25. Pillay, P.C.; Njenga, K.J. Opportunities for reducing expenses through digital innovation: The case of an insurance company. *Afr. J. Inf. Syst.* **2021**, *13*, 5.

26. InsurTech Unconference. 2016. Available online: http://www.rdmf.es/wp-content/uploads/2019/06/AEFI_Libro_Blanco_de_Insurtech.pdf (accessed on 23 April 2022).

27. Husseini, F. *The Open Insurance Initiative*; Open Insurance: Sydney, Australia, 2018.

28. Bernardino, G. Challenges and opportunities for the insurance sector in Europe. *Ann. Mines Réalités Ind.* **2020**, *1*, 99102. [CrossRef]

29. Chatzara, V. FinTech, InsurTech, and the Regulators. In *A Legal and Regulatory View*; InsurTech: AIDA Europe Research Series on Insurance Law and Regulation; Marano, P., Noussia, K., Eds.; Springer: Cham, Switzerland, 2020; Volume 1, pp. 3–25.

30. Gramegna, A.; Giudici, P. Why to buy insurance? An explainable artificial intelligence approach. *Risks* **2020**, *8*, 137. [CrossRef]

31. Vargas, Ó. Insurtech: Innovación tecnológica para la inclusión financiera. *Rev. Fasecolda* **2017**, *167*, 64–67.

32. European Insurance and Occupational Pensions Authority. How technology and data are reshaping the insurance landscape. In Proceedings of the EIOPA InsurTech Roundtable, Frankfurt, Germany, 28 April 2017; pp. 1–17.

33. Deloitte. InsurTech Entering its Second Wave. In *Investment Focus Shifting from New Startups to More Established Innovators*; Deloitte Center for Financial Services: London, UK, 2018; pp. 1–17.

34. Braesemann, F.; Baum, A. *PropTech: Turning Real Estate into a Data-Driven Market? Working Paper*; Oxford Future of Real Estate Initiative: Oxford, UK, 2020; pp. 1–22.

35. Saïd Business School. *PropTech 2020: The Future of Real Estate*; University of Oxford Research: Oxford, UK, 2020; pp. 1–110. Available online: https://www.sbs.ox.ac.uk/sites/default/files/2020-02/proptech2020.pdf (accessed on 23 April 2022).

36. Baum, A. *PropTech 3.0: The Future of Real Estate*; University of Oxford: Oxford, UK, 2017.

37. Feth, M.; Gruneberg, H. Proptech—The Real Estate Industry in Transition. In *Environment for Innovation*; Ritterwald: Berlin, Germany, 2018.

38. Crowston, K.; Wigand, R. Real estate war in cyberspace: An emerging electronic market? *Int. J. Electron. Mark.* **1999**, *9*, 1–8.

39. KPMG Funcas. Fintech, Innovación al Servicio del Cliente. In *Informe del Observatorio de la Digitalización Financiera Funcas-KPMG*; KPMG Asesores, S.L.: Madrid, Spain, 2017.

40. Agresti, A. *Categorical Data Analysis*, 2nd ed.; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 2002.

41. Agresti, A. *Foundations of Linear and Generalized Linear Models*; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 2015.

42. Agresti, A.; Franklin, C. *Statistics. The Art and Science of Learning from Data*, 3rd ed.; Pearson: Boston, MA, USA, 2013.

43. Greene, W.H. *Econometric Analysis*, 8th ed.; Pearson: New York, NY, USA, 2018.

44. Carbó Valverde, S.; Cuadros Solas, P.J.; Rodríguez Fernández, F. Taxonomy of the Spanish FinTech ecosystem and the drivers of FinTechs' performance. *Rev. Estab. Financ.* **2020**, *38*, 29–52.

45. Carbó Valverde, S.; Cuadros Solas, P.; Rodríguez Fernández, F. Radiografía del sector fintech español. *Cuad. Inf. Econ.* **2020**, *274*, 25–31.

46. Finnovating. Informe Resultados. 2017. Available online: https://goo.gl/4dq6xg (accessed on 28 August 2022).

47. BBVA Communications. What Are the ESG Criteria and Why Are They Important for Investors? Available online: bbva.com (accessed on 28 August 2022).

48. This is How Fintech Can Help Implement a Green Economy. Available online: https://www.bbva.com/en/this-is-how-fintech-can-help-implement-a-green-economy/ (accessed on 28 August 2022).

49. Refinitiv Redefiniendo las Necesidades de Datos de los Inversores. El Estándar de Oro del Wealth Management. Refinitiv. Available online: https://www.refinitiv.com/es/recursos/informes-especiales/redefining-investor-data-needs-wealth-management (accessed on 28 August 2022).

50. Nielsen. Available online: https://www.nielsen.com/eu/en/press-releases/2015/consumer-goods-brands-that-demonstrate-commitment-to-sustainability-outperform/ (accessed on 28 August 2022).

51. Sustainability for Consumer Business Companies. Available online: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Consumer-Business/dttl_cb_Sustainability_Global%20CB%20POV.pdf (accessed on 28 August 2022).

52. Eco-Friendly Start-Ups Position Themselves in the Spanish Market. Available online: https://www.bbva.com/en/sustainability/eco-friendly-start-ups-position-spanish-market/ (accessed on 28 August 2022).

53. Código de Buen Gobierno Sociedades Cotizadas. Available online: https://www.cnmv.es/DocPortal/Publicaciones/CodigoGov/CBG_2020.pdf (accessed on 28 August 2022).

54. Macchiavello, E.; Siri, M. Sustainable Finance and Fintech: Can Technology Contribute to Achieving Environmental Goals? A Preliminary Assessment of 'Green FinTech'. *Eur. Bank. Inst. Work. Pap.* **2020**, *71*, 128–174. [CrossRef]

55. A Study about the Spanish Consumer's Attitude and Knowledge to Face Climate Change. Available online: https://www.ie.edu/school-architecture-design/news-events/news/study-spanish-consumers-attitude-knowledge-face-climate-change/ (accessed on 28 August 2022).

56. Puschmann, T.; Hoffmann, C.H.; Khmarskyi, V. How green Fintech can alleviate the impact of climate change—The case of Switzerland. *Sustainability* **2020**, *12*, 10691. [CrossRef]

57. Campanella, F.; Serino, L.; Crisci, A. Governing Fintech for sustainable development: Evidence from Italian banking system. *Qual. Res. Financ. Mark.* **2022**, *ahead of printing*. [CrossRef]

58. Castro, P.; Rodrigues, J.P.; Teixeira, J.G. Understanding FinTech Ecosystem Evolution Through Service Innovation and Socio-technical System Perspective. In *Exploring Service Science*; IESS 2020. Lecture Notes in Business Information Processing; Nóvoa, H., Drăgoicea, M., Kühl, N., Eds.; Springer: Cham, Switzerland, 2020; Volume 377.

59. Holmes, C.; King, R. The evolution of business-to-business FinTech: What the future holds. *J. Paym. Strategy Syst.* **2019**, *13*, 217–225.

60. Roeder, J.; Cardona, D.R.; Palmer, M.; Werth, O.; Muntermann, J.; Breitner, M.H. Make or break: Business model determinants of FinTech venture success. In Proceedings of the Multikonferenz Wirtschaftsinformatik, Lüneburg, Germany, 6–9 March 2018.

61. Păun Zamfiroiu, T.; Pinzaru, P. Advancing strategic management through sustainable finance. *Manag. Dyn. Knowl. Econ.* **2021**, *9*, 279–291.

62. Chueca Vergara, C.; Ferruz Agudo, L. Fintech and sustainability: Do they affect each other? *Sustainability* **2021**, *13*, 7012. [CrossRef]

63. Hábitos de Sostenibilidad en España. La Transición del Consumidor al Ciudadano. Available online: http://www.estudiodecomunicacion.com/downloads/White%20Paper.pdf (accessed on 28 August 2022).

64. Merello, P.; Barberá, A.; De la Poza Plaza, E. Is the sustainability profile of FinTech companies a key driver of their value? *Technol. Forecast. Soc. Chang.* **2022**, *174*, 121290. [CrossRef]

65. Valero, S.; Climent, F.; Esteban, R. Future banking scenarios. Evolution of digitalisation in Spanish banking. *J. Bus. Account. Financ. Perspect.* **2020**, *2*, 13. [CrossRef]

66. Herrador-Alcaide, T.; Hernández-Solís, M. Empirical study regarding non-financial disclosure for social conscious consumption in the Spanish e-credit market. *Sustainability* **2019**, *11*, 866. [CrossRef]