

ESG and Crowdfunding Platforms

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Abstract

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Keywords:

ESG, Fintech, Digital finance, Platforms, Entrepreneurial Finance.

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Abstract

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1. Introduction

There is increasing agreement about the importance of addressing environmental, social, and governance (ESG) issues, such as climate change, global injustice, and corruption (see e.g., United Nations Principles of Responsible Investment, 2021; European Commission, 2019; G20 Sustainable Finance Working Group, 2021). From a perspective of financial economics theory, the investment criteria set by individual capital providers to obtain a private financial return might lead to a suboptimal equilibrium that neglects societal (unpriced) externalities (Barber et al., 2021; Hong and Kacperczyk, 2009). Entrepreneurial ventures with high ESG levels might indeed appear less attractive to traditional professional investors such as venture capitalists and business angels, relative to business models with high-growth potential that meet the short-term investment horizons of these private equity investors (Baum and Silverman 2004; Davila et al., 2003; Shane, 2002). Fortunately, the emergence of Fintech platforms provides new opportunities to raise financial resources using the Internet. Exploring the functioning of platforms is interesting because, like venture capitalists and business angels, they provide an important way to mobilize resources for new ideas but they are in many ways different than those two (and other) methods.

This paper jumpstarts a conversation between fintech and ESG. Fintech platforms provide financial services in the areas of factoring, invoices, leasing, and security-based crowdfunding (Gomber et al., 2017). We focus on the latter, which is one of the most popular types of Fintech, with \$4.81b capital raised worldwide in 2020 (Cambridge Centre for Alternative Finance, 2021). Security-based crowdfunding platforms provide a new market model that matches the demand for capital by entrepreneurs with the supply of capital by a “crowd” that includes small investors (e.g., Agrawal, 2014; Block et al., 2021; Bruton, 2015). In the hopes of policymakers (see for instance the JOBS Act in the United States), these platforms have the potential of democratizing the access to finance for traditionally under-represented categories of entrepreneurs (Cumming et al., 2021a) and of providing unprecedented opportunities to individuals of direct early-stage investment in ventures. Previous

studies have shown that, rather differently from traditional financial markets, crowdfunding investors select projects based also on their wish to support causes they care for (Belleflamme et al., 2014; Cumming et al., 2017). Moving from these arguments, Vismara (2016) investigate how a sustainability orientation of security-based crowdfunding offerings impacts their chances of success, finding that although sustainability orientation attracts a higher number of restricted investors, it does not increase the chances of success or engaging professional investors. Mansouri and Momtaz (2022) find that a sustainability orientation has a positive effect on the initial valuation of blockchain-based crowdfunding offerings and a negative effect on their post-funding financial performance.

No attention has so far been given to the role of crowdfunding platforms themselves. This is an important gap in the literature given the role of crowdfunding platforms as gatekeepers of ESG businesses that seek to list online (e.g., Cumming et al., 2019; Löher, 2017; Meoli et al., 2022; Kleinert et al., 2021). Differently from other types of Fintech, such as initial coin offerings (ICOs), where there is no platform upon which ICOs must occur (Fisch, 2019), crowdfunding platforms actively intermediate the matching between supply and the demand of capital. While the final investment decision is left to individual investors, the intermediary role played by the platform is crucial in screening projects. Crowdfunding platforms evaluate the applications according to formal criteria, such as completeness, overall impression, market potential, team, or business model (Kleinert et al., 2021; Löher, 2017) and perform due diligence (Cumming et al., 2021b), including independent research to validate statements in the applications (Cumming et al., 2019; Rossi and Vismara, 2018). Often crowdfunding platforms include specific ESG factors in their criteria to admit businesses to be listed on their portal. In this paper, we focus on these ESG criteria.

We argue that applying ESG criteria to the selection of ventures is critical to the long-term prospects of Fintech platforms for three reasons. First, there is a direct, financial reason. Similarly to the functioning of other financial marketplace platforms (Lin et al., 2001), success fees charged upon successful offerings are an important building block of a crowdfunding platform's revenue model

(Dushnitsky et al, 2022; Löher, 2017; Rossi and Vismara, 2018; Kleinert et al., 2021). Since ESG factors are critical to firms' long-term value (Pástor et al., 2020; Edmans, 2022), ESG criteria are critical in the selection of ventures likely to successfully raise funds both in their initial and “seasoned” crowdfunding offerings. A growing literature has indeed demonstrated that ventures that approach security-based crowdfunding markets are likely to persist in their search for new equity capital through a sequence of crowdfunding offerings (Coakley et al., 2022; Signori and Vismara, 2018; Vanacker et al., 2019; Walthoff-Borm et al., 2018). Second, the long-term prospects of crowdfunding platforms are linked not only to economic reasons but also to the social connections that they enable among people of a similar set of shared values. Crowdfunding platforms build up communities anchored together by a broader set of espoused social values (Gleasure and Feller, 2017). As such, their prospects depend also on their capacity of creating a fabric of collaboration (Faraj et al, 2018) and foster community-building networks of heterogeneous investors around a sense of “shared purpose” (Bodrožić and Adler, 2022). ESG factors are a key ingredient to reaching this goal. Third, as far as “the main reason for the rise in ESG is its relevance to long-term value” (Edmans, 2022: p.5), ESG criteria are strictly connected to the chance of survival of crowdfunding platforms. Indeed, most ESG activities are long-term so it is difficult to determine the time horizon ESG activities should be measured. For instance, environmental activities reduce the risks of costly future environmental incidents, such as hazardous chemicals, substantial emissions, and climate change concerns (Chava, 2014). Considering the novelty of crowdfunding and how recently ESG has become “mainstream”, what we currently observe might be transitory and the market may be transitioning to a new equilibrium. While crowdfunding platforms and the volume of financing they provide have been growing globally, crowdfunding platforms often do not survive in the long run (Meoli et al., 2022). Coherently, in this study, we take a dynamic perspective and study crowdfunding platforms over time to test whether including ESG factors in selecting investment opportunities enhances the likelihood of a platform to survive in the long term.

Country characteristics appear important in explaining the financial returns in ESG investments (Barber et al., 2021). Still, including ESG criteria in the selection of businesses is an indicator of awareness for broader issues than just the narrow financial return. We contend that the effect of ESG criteria on the survival of crowdfunding platforms is influenced by cultural characteristics. Culture indeed impacts economic outcomes because it refers to the values that are predominant in a country, its institutions and resource allocation (Guiso et al., 2006; Stulz and Williamson, 2003; Tabellini, 2010). Specifically, in line with previous studies on corporate finance events (e.g., Huang et al, 2017), we focus on power distance and argue that ESG criteria are particularly important for platforms in countries with a culture of low power distance, where individuals aim at disrupting power inequalities concerning the environment (e.g., the power held by established oil producers), society (e.g., inequalities in the distribution of goods in a society), and corporate governance (e.g., unequal voting power distribution among shareholders). Accordingly, we test whether power distance moderates the relationship between ESG criteria and the survival of crowdfunding platforms.

The empirical analysis of this study is based on the universe of 508 platforms in the 38 Organisation for Economic Co-Operation and Development (OECD) countries, observed between 2007 and 2020. This unique dataset is representative of the security-based crowdfunding industry and allows us to investigate how the market evolved over time. We find that the development of crowdfunding is related to ESG, in that crowdfunding platforms are more likely to survive over time if they consider ESG criteria in the selection of businesses. To understand the mechanisms, we disentangle whether platform survival is a direct or indirect effect of the implementation of ESG criteria by using the analysis of mediating models proposed by Discacciati et al. (2019). We find evidence of a mediating effect, with ESG criteria impacting the survival profile of crowdfunding platforms by increasing their number of investors. However, after considering this mediating effect, there is still a direct effect of ESG on platform survival. This relationship between ESG criteria and

the survival of crowdfunding platforms is stronger for platforms based in countries where power distance is lower, consistent with the view that cultures with a low level of power distance have stronger preferences for ESG businesses. Finally, we perform our analysis separating the three components (namely environmental, social and governance criteria) and find that governance is the component that prevails. When analyzing the dynamics over time, however, we find that governance criteria have had a constant effect during the sampling period, while environmental criteria have emerged in recent years as an important determinant of platform survival.

2. Theoretical background

Security-based crowdfunding is an ideal setting where to investigate ESG. The investment criteria of traditional capital providers typically consider expected yields, security of the investment, and accounting liquidity as the most important investment criteria (Baum and Silverman 2004; Davila et al., 2003). A few authors argue that one of the obstacles that hinder businesses with high ESG levels is the challenge in finding funding (e.g., Fedele and Miniaci, 2010; Gaddy et al., 2017; Lehner, 2013; Petkova et al., 2014; Ridley-Duff, 2009). Security-based crowdfunding might fill this gap for three reasons. First, the set of investors is more heterogeneous than traditional providers of entrepreneurial finance (Gerber and Hui, 2016; Signori and Vismara, 2018). Consistently, the motivations to invest are heterogeneous. Some investors look exclusively for financial returns, while others are also interested in contributing to ESG issues (Hornuf et al., 2022b; Tenner and Hörisch, 2020; Vismara, 2019). Second, given that younger generations are well represented in crowdfunding markets¹ and empirical studies show that these generations are more likely to have ESG orientations than older generations (Cahill and Sedrack, 2012; Eversole et al., 2012; Hewlett et al., 2009), ESG issues may create a feeling of identification among these younger investors. Third, crowdfunding has emerged, among others, out of disappointment with the fairness of traditional financial markets and the related

¹ 31% of crowdfunding investors on the UK crowdfunding platform Crowdcube are aged between 25-34, this age range being the most prolific. Source: <https://www.crowdcube.com/explore/blog/crowdcube/celebrating-1m-members>

difficulties faced by entrepreneurs and early-stage new ventures in raising funds (Block et al., 2018). Therefore, investors in crowdfunding may be particularly sensitive to ESG issues.

The potential of crowdfunding to contribute to the financing of sustainable businesses has attracted research attention, leading to a vivid debate in the context of crowdfunding. Existing literature on reward-based crowdfunding provides mixed findings. Some empirical works suggest a positive relationship between a sustainability orientation and the outcome of crowdfunding campaigns. Calic and Mosakowski (2016) find that the sustainability orientation of technology and film/video projects positively affects funding on the leading reward-based crowdfunding platform Kickstarter. The direct effect of a sustainability orientation is partially mediated by the creativity of crowdfunding projects, but the mediating effect for project legitimacy is only found in the technology sample. Using the same platform, Bento et al. (2019b) find that the perceived sustainable mission positively influences both the outcome of the campaign and the chances of survival after one year of operations. Other reward crowdfunding studies find instead that sustainability orientation has little or no impact on the success of crowdfunding campaigns. Using the reward-based crowdfunding platform Indiegogo, Hörisch (2015) finds no correlation between sustainability orientation (specifically environmental orientation) and crowdfunding success. Different results are reported by Lagazio and Querci (2018), who find that social impact initiatives (e.g., referring to the well-being of animals, communities, and the environment) has a negative impact on the offering outcome, decreasing funding chance by 13%. Testa et al. (2020) study sustainable-oriented food-related projects on Kickstarter and show that the emphasis on self-centered product attributes, rather than on society-centered ones, is more crucial to facilitating crowdfunding support.

More recently, research on the sustainability orientation of crowdfunding campaigns has focused also on security-based crowdfunding. Vismara (2019) studies sustainability on the two leading UK equity crowdfunding platforms Crowdcube and Seedrs. His findings show that, although sustainability orientation attracts a higher number of restricted investors, it does not increase the

chances of success or engaging professional investors. Whereas professional investors select promising ventures to generate high economic returns, small ones consider also goals beyond purely financial returns. For instance, Bento et al. (2019a) study clean-tech projects which raised capital via crowdfunding, showing that returns are not consistent with the risks related to the technology adopted by the projects. Such behavior can be explained by the fact that investors evaluate clean-tech crowdfunding projects not solely for the associated financial returns but also for non-financial considerations such as the environmental and social impact.

The characteristics and behavior of security-based crowdfunding investors involved in sustainability-oriented projects have been studied in a number of recent papers (Hornuf et al., 2022b; Tenner and Hörisch, 2020). Tenner and Hörisch (2020) find that the typical supporter of sustainability-oriented projects is young, well-educated, and holds low levels of self-enhancement and conservative values. Based on a cross-platform study on the six leading German security-based crowdfunding platforms, Hornuf et al. (2022b) find that sustainability-oriented investors pledge larger amounts of money and invest in more campaigns with respect to ordinary crowdfunding investors. Furthermore, they show that sustainability-oriented crowd investors care about non-financial returns, as they react more sensitively after experiencing a default in their equity crowdfunding portfolios, which indicates that they suffer beyond the pure financial loss. Hornuf and Siemorth (2023) find that investors allocate a larger share of funds to green projects if they value environmental impact more, and if they expect green projects to be more profitable.

These previous findings link security-based crowdfunding to the literature and debate on socially responsible investing (SRI), which is defined by the United Nations Principles of Responsible Investment as a “strategy and practice to incorporate ESG factors in investment decisions and active

ownership”.² Similar to traditional investors, SRI investors aim for financial returns through the provision of financial assets. However, in addition to these financial goals, SRI investors seek opportunities for financial investment that addresses ESG issues (e.g., Geczy et al., 2021; Gillan et al., 2021). SRI applies a set of investment screens to select or exclude assets based on ESG criteria and often engages in the local communities and in shareholder activism to further corporate strategies toward the above aims. For instance, SRI investors often invest in sectors that address global challenges, such as those that aim to reduce poverty or mitigate climate change and promote sustainable agriculture, green buildings, low carbon footprint, gender equality, and diversity.

SRI investing is an important catalyst for developing sustainable businesses. This is true for entrepreneurial finance in particular, with entrepreneurs increasingly confronted with investors’ demand for companies to meet a triple-bottom-line of economic, environmental, and social value creation. Since the goals of traditional investors differ from those of SRI investors, the investment selection processes and the screening criteria of SRI investors and traditional investors likely differ as well (e.g., Chowdhry et al., 2019; Hartzmark and Sussman, 2018). SRI investors, indeed, do not solely assess the potential financial return of portfolio ventures but also consider the ESG factors. Similarly, security-based crowdfunding investors may have a multi-attribute utility function that is not only based on the standard risk-reward optimization but also incorporates a set of personal and societal values.

3. Hypotheses

Fama and French (2007) developed a framework that can be applied to determine how investors’ ESG-related utility affects expected returns. They show that when utility functions for at least some

² Socially responsible investing may be used interchangeably with sustainable investing and impact investment, whilst recognizing there are distinctions and variations in its meaning and use. As defined by the Global Sustainable Investment Alliance, sustainable investing is “an investment approach that considers ESG factors in portfolio selection and management”. Impact investing is defined by the Global Impact Investing Network (GIIN) as “investments made with the intention to generate positive, measurable social and environmental impact alongside financial return”. See Barber et al. (2021), Geczy et al., (2021), Pástor et al. (2020) for recent papers on SRI.

investors include variables other than future consumption, prices deviated from the standard predictions of the conventional risk and return model. If some investors derive ESG-related utility from holding green assets, the expected return from investing in assets that are greener will be lower, with the magnitude of the effect depending on the amount of money invested by investors.

As an illustration of this effect, Hong and Kacperczyk (2009) studied what they call “sin” stocks”, that is, companies involved in business such as producing alcohol, tobacco and gaming. Consistent with Fama and French’s (2007) theory, they argue that these are stocks for which investors have negative tastes. They find that sin stocks are less commonly held by institutions and that they have higher average returns than otherwise comparable stocks. Thus, investors must be compensated in terms of greater expected return for the reputational costs associated with holding sin stocks. The reverse would be true for highly rated ESG stocks for which investors derive ESG-related utility. Barber et al. (2021) find that venture capital funds that aim not only for financial return but also for social impact earn lower returns than other funds. In the same vein, Zerbib (2019) finds that green bonds tend to be priced at a premium, offering lower yields than traditional bonds. Chava (2014) and El Ghouli et al. (2011) find that greener firms have a lower implied cost of capital. All these studies are consistent with green assets being associated with lower expected financial returns.

Crowdfunding investments are likely to be locked into the business for a long time and investors are unlikely to be able to sell shares quickly. For instance, the JOBS Act in the United States prohibits a secondary market during the first year of issuance. Furthermore, investors may not receive dividends on the investment as the business might reinvest any profits to facilitate further growth. In the absence of liquid secondary markets, crowdfunding investors have the opportunity to realize returns on their investments only in the presence of post-offering deals, such as mergers and acquisitions or initial public offerings, which are unlikely to realize for crowdfunded firms (Signori and Vismara, 2018). However, crowdfunding investors consider not only financial returns but also societal ones (Bento et al., 2019a; Vismara, 2019). Accordingly, the potential to generate non-

financial ESG-related utility to crowdfunding investors is expected to compensate for the cost associated with holding illiquid crowdfunding shares. Thus, including ESG criteria in the selection of businesses positively impact the survival of crowdfunding platforms, thereby attracting a larger number of investors. We formulate Hypothesis 1 as follows:

Hypothesis 1: The level of ESG is positively related to the survival profile of crowdfunding platforms.

Culture is defined as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation” (Guiso, 2006). People from the same culture share beliefs and values that are expected to influence their financial choices. Stulz and Williamson (2003) examine the relationship between culture and financial development, finding that culture is correlated with creditor rights and the development of debt markets. Ahern et al. (2015) find evidence that cultural dimensions, namely trust, hierarchy and individualism, affect merger volumes and synergy gains, and document fewer cross-border mergers between countries that are more culturally distant. Giannetti and Yafeh (2012) investigate whether cultural differences between professional investors affect financial contracts, showing that more culturally distant lead banks offer borrowers smaller loans at a higher interest rate and are more likely to require third-party guarantees.

Culture also relates to the sensitivity to environmental issues and societal responsibility, influencing ethical decision-making (Vitell et al., 1993). Cultural dimensions play important roles in explaining differences in corporate social performance (CSP) among countries (Cai et al., 2016). They find that CSP ratings are high for cultures oriented toward harmony (i.e., a cultural emphasis on fitting harmoniously into the environment) and autonomy (i.e., individuals pursue affectively positive experiences for themselves). Cultural traits such as social cohesion and equal opportunities have also been documented to be structural factors capable of affecting managerial decisions related

to ESG disclosure (Baldini et al., 2018). In the context of security-based crowdfunding, Cumming et al. (2017) finds that cleantech crowdfunding projects are more likely to originate in countries with low levels of individualism (i.e., propensity to accept that others will benefit from positive externalities) and long-term orientation (i.e., care about future generations).

Power distance, as one aspect of culture, affects how individuals make sense of and consequently behave in reaction to formal and informal hierarchical relationships (Hofstede, 1984). Following Hofstede (1984), the GLOBE Study (House et al., 2004) definition of power distance is “the extent to which the community accepts and endorses authority, power differences, and status privileges”. In high power distance cultures, individuals in lower positions are inclined to respect higher-positioned people, who expect lower-positioned people to follow orders. In formal organizations, high power distance allows managers to pursue their own interests and those of their shareholders with little regard for other stakeholders and the broader society. High power distance is also associated with high corruption (Davis and Ruhe, 2003), suggesting that in countries where power distance is high, corporate managers are more likely to exploit stakeholders and the broader society than support them. Vice versa, low power distance cultures hold up egalitarianism as the ideal. Power distance as a cultural dimension is therefore related to the perception of social inequalities.

In security-based crowdfunding, power distance is particularly relevant because of its direct implications for how individuals behave in reaction to the differential access to financial resources. Unlike traditional entrepreneurial finance markets, security-based crowdfunding has the potential to make financing more accessible to traditionally disadvantaged categories of entrepreneurs (Cumming et al., 2021a). Specifically, the application of ESG criteria by crowdfunding platforms provides unprecedented financing opportunities to entrepreneurial ventures with high ESG levels, which might appear less attractive to traditional professional investors such as venture capitalists and business angels. By influencing how individuals react to disparities across different categories of entrepreneurial ventures seeking financing, we argue that the power distance cultural dimension

affects the extent to which ESG-related utility is valued when investing in security-based crowdfunding, such that low power distance cultures are more likely to value the potential for inclusivity and sustainability from the application of ESG criteria by security-based crowdfunding platforms. In these respects, extant literature shows how, in countries characterized by higher power distance, charitable behaviors decrease (Winterich and Zhang, 2014), stakeholders have a lower perception of the importance of reporting standards (Zengin Karaibrahimoglu and Guneri Cangarli, 2016) and entrepreneurs have a lower propensity to innovate (Rinne et al., 2012). These prior studies all support that, when power distance is high, ESG principles would be perceived as less important by investors, entrepreneurs and other stakeholders, while when power distance is low, we may expect the higher ESG scores to have a stronger impact on behaviors, and ultimately on platform survival. Thus, including ESG criteria in the selection of businesses is particularly important for platforms operating in countries where there is a culture of low power distance. This leads to our Hypothesis 2:

Hypothesis 2: Power distance negatively moderates the relationship between the level of ESG and the survival profile of crowdfunding platforms.

4. Research design

4.1. Sample

The sample of the present study includes information on the population of 508 crowdfunding platforms launched in the period 2007-2020 in 38 OECD countries. The market volume of alternative finance transactions is mainly concentrated in the OECD countries. According to the 2nd Global Alternative Finance Market Benchmarking Report published in June 2021 by the Cambridge Centre for Alternative Finance, the OECD countries together accounted for 89% of market share of global volumes, corresponding to a volume of approximately \$101.4 billion in 2020. In terms of the number of platforms, the market share of local platforms operating in the OECD countries accounted for 93%

of active platforms in 2020. This evidence makes the sample of the present study representative of the entire population of crowdfunding platforms.

ESG investing market practices have grown considerably and they are becoming mainstream in many financial markets across the OECD countries (OECD, 2022a). Specifically, the number of platforms with the specific objective to promote ESG issues has increased significantly (OECD, 2022b). However, as shown by the country's ESG scores by the Sovereign ESG Data Portal (esgdata.worldbank.org), OECD countries still present a large degree of diversity regarding ESG levels. For example, the degree of fossil fuel energy consumption (an indicator for Environmental pillar) ranks Israel and the Netherlands among the highest-scoring countries, while Estonia and Sweden are among the lowest. Similarly, the proportion of seats held by women in national parliaments (an indicator for the Governance pillar) ranks New Zealand and Sweden among the highest-scoring countries, while Hungary and Turkey are among the lowest. OECD data are therefore uniquely suited to allow for an effective assessment of the impact of ESG on the development of alternative finance markets.

As we study crowdfunding platforms operating in different countries, our sample is built using different sources. Crowdfunding platforms allow individuals to purchase securities from companies in the form of equity and/or debt, including equity-based crowdfunding, real estate, profit sharing, debt-based securities, and mini-bonds (Crowdfunding categories are taken from “The Global Alternative Finance Market Benchmarking”, published in June 2021 by the Cambridge Center of Alternative Finance). Crowdfunding platforms in our sample work under an all-or-nothing fundraising policy, such that an entrepreneurial venture sets a fundraising goal and keeps nothing unless the goal is achieved (Cumming et al., 2020). The research design follows prior research on crowdfunding platforms (e.g., Meoli et al., 2022). First, we identified crowdfunding platforms from crowdfunding national registries (e.g., the *Conseiller en Investissements Participatifs* registry for French platforms, the *Commissione Nazionale per le Società e la Borsa* registry for Italian platforms,

the Financial Industry Regulatory Authority registry of crowdfunding intermediaries for US platforms). Second, we examined all national crowdfunding-related associations and listed their members (e.g., the European Crowdfunding Network, the Nordic Crowdfunding Alliance, and ALTFInator). Third, we reviewed reports which focused on crowdfunding in one or more of the 38 OECD countries (e.g., “2013CF Crowdfunding Industry Report”, “2015CF Crowdfunding Industry Report”, “Identifying market and regulatory obstacles to cross-border development of crowdfunding in the EU” funded by the European Commission, “The Global Alternative Finance Market Benchmarking”).

4.2. Platform survival

To test our hypotheses, we assess the survival of crowdfunding platforms. We identify a platform termination according to the following three scenarios. First, the platform website becomes inaccessible for at least six months. Second, the platform declares its failure on the website or ceases to operate in the crowdfunding business. Finally, a platform is acquired by another platform. Simple graphs offer a readable way to present the evolution of the industry. Figure 1 describes the population of 508 crowdfunding platforms active between 2007 and 2020. A platform is active in the period between the platform launch and its termination, or to 2020 if still operating as of December 31, 2020. Platform launch is the incorporation date available on the platform website, while platform termination is the time at which the platform experiences one of the termination scenarios described. We observe that the number of active platforms has been increasing from 2007 to 2017 when it settled at around 300 active platforms. The recent stabilization of the number of active platforms is due to the increasing number of platforms that closed since 2014, accounting for a total of 187 terminations. Since 2018, the number of yearly newborn platforms has been close to the number of yearly terminations.

[Insert Figure 1 here]

4.3. Variables

Table 1 defines the variables employed in the survival analysis. Variables are divided into four groups: (1) ESG components, (2) cultural dimensions, (3) platform-level controls, and (4) regional-level controls.

4.3.1. ESG components

To test the impact of ESG on the survival profile of crowdfunding platforms, we need to measure the extent to which ESG criteria are included in the selection of businesses available to crowdfunding investors. By including ESG factors in the selection of firms, platforms aim to select businesses that address environmental, social and governance issues. For instance, the crowdfunding platform EDULIS “adheres to principles of social, economic and environmental responsibility”, as a result, it “promotes ESG criteria in the world of SMEs”. In a similar case, the crowdfunding platform LITA has the mission to “actively contribute towards reducing social and environmental inequalities in the world”, and “carefully select investment opportunities based on their social impact, responsibility in terms of ESG criteria and economic potential”.

The overall level of ESG is operationalized with a single count variable (*ESG*) ranging from 0 to 12, obtained from the sum of the three distinct environmental, social, and governance variables, measured annually. Environmental, social, and governance components are operationalized with three distinct count variables (*Environmental*, *Social*, *Governance*) ranging from 0 to 4, representing the number of environmental, social, and governance issues included in the selection of businesses. ESG issues are taken from the Morgan Stanley Capital International ESG Intangible Value Assessment (MSCI ESG IVA)³. Ratings from the MSCI ESG IVA have been employed in the finance literature to measure a company’s engagement in ESG (e.g, Cai et al., 2016; Liang and Renneborg,

³ The list of ESG issues, on which the MSCI ESG IVA methodology is based, is available at https://www.msci.com/documents/10199/242721/IVA_Methodology_SUMMARY.pdf/cb947ab8-509e-44fd-8e4b-afb53771fbcb

2017). ESG issues are the following: *Climate change*, *Natural resources*, *Pollution and waste*, *Environmental opportunities* (environmental component), *Human capital*, *Product liability*, *Stakeholder opposition*, *Social opportunities* (social component), *Ownership and governance*, *Board of directors*, *Business ethics*, and *Financial stability* (governance component).

ESG criteria might change over time. For instance, when the French platform WiSeed was launched, the selection of businesses on the platform did not include specific ESG criteria. However, starting in 2018, the platform introduced ESG criteria in the selection of businesses, thereby offering investors the opportunity to fund businesses addressing environmental and social issues. As of 2021, each investment opportunity on WiSeed appears along with ESG scores, allowing investors to measure the positive impact of businesses being selected by the platform. Appendix A reports screenshots from WiSeed website documenting a change in the selection of ESG businesses. As there are platforms that have gradually introduced ESG criteria in their selection process, the ESG variable is measured annually, in each year of platform activity. We tasked two coders to judge each platform's level of ESG. Coders are recruited annually since 2018. We use Wayback Machine to reconstruct the platform ESG levels in the years before 2018. Internet archives, such as Wayback Machine, enable indeed to go back in time and capture historical data from websites.

Following Calic and Mosakowski (2016), the coders are recruited from the undergraduate program at the authors' university (in general, many of the coders' demographic characteristics were similar to those in the crowdfunding community, with the exception of income). Coders did not communicate with each other, and the authors met with the coders to explain how to answer any questions. Appendix B reports examples of instructions provided to the coders. Each coder was instructed to read the platform description and code each platform with a 1 if each social, environmental, and/or governance issue is included in the criteria to select businesses. Five platforms outside of the sample were chosen by the authors to illustrate ESG to coders. After completing the coding of these five platforms, each coder met with the authors to discuss any ambiguities (note that

the coders' evaluations of these five platforms perfectly matched that of the authors). Coders completed their work within four weeks and approximately 80 hours of work per coder. Intercoder reliability (calculated as $2*NE/(NC1+NC2)$, where NA is the Number of Equal answers, NC1 is the Number of questions answered by Coder 1 and NC2 is the Number of questions answered by Coder 2) is greater than 90%. We can therefore consider evaluations provided by the coders as reliable. In case of disagreement (10%), the authors choose the best answer based on their own evaluation.

Examples of platforms that include specific ESG criteria in the selection of businesses are the Austrian platform "Crowd4Climate", which aims to address climate change issues by offering the opportunity to invest in firms with a "significant contribution to the reduction of greenhouse gases through energy efficiency"; the Spanish platform "La Bolsa Social", whose mission is to enhance social opportunities by financing firms that "have a positive impact on society", "promote ethical finance", and "democratize impact investing"; and the Australian platform "EnrichHER" whose core values include the promotion of an inclusive board of director culture by sustaining companies with "founders and gender-diverse teams". Additional details are provided in Appendix C.

4.3.2. Power distance

The moderating variable employed in the analysis is the level of power distance of the platform's investors, measured using the country level of power distance. The degree of power distance is based on the Power Distance index included in the Global Leadership and Organizational Behavior Effectiveness Study (GLOBE)'s cultural dimensions, which are widely used cultural indices that capture social attitudes and norms (House et al., 2004). GLOBE data were collected between 1994 and 1997 and are based on a carefully developed methodology (e.g., theory-driven, building on qualitative pre-studies and verifying data aggregation to the country level, Hanges and Dickson, 2004). For each of the GLOBE's dimensions, there are two sub-dimensions: cultural practice and cultural value. While cultural practices are judgments providing information on the typical behavior of most people in a culture (Fischer, 2006; Stephan and Uhlaner, 2010), cultural values are artifacts

reflecting aspirations of what people in a culture ideally ought to be like. We concur with the argument that cultural values have a stronger predictive power on the extent to which ESG-related utility is valued when investing in crowdfunding since they are related to answers by respondents concerning personal preferences versus typical behavior in their culture (House et al., 2004; Stephan and Uhlaner, 2010). Therefore, our study only examined GLOBE's cultural values.

The GLOBE study describes Power distance as the degree to which the members of a society accept power to be distributed unequally. It represents inequality defined from below, suggesting that a society's level of inequality is endorsed by the subordinates as much as by the superiors. In high power distance cultures, superiors are inaccessible and enjoy the privileges their power gives them, while in low power distance cultures, the relations between subordinates and superiors are more horizontal than vertical. Previous studies use the cultural dimension Power distance provided either by the GLOBE project or by Hofstede (1984). In our main analysis, we opted for the GLOBE index since, unlike Hofstede, it does not mix values and practices. Specifically, Hofstede's scale appears to be measuring mostly organizational cultural practices with two of the three items in the scale assessing cultural practices. Only the remaining item appears to be a values-based question asking about the type of manager preferred by the respondents. As our study focuses on cultural values, GLOBE's dimension for power distance appears to be more appropriate than the one developed by Hofstede.

In our analysis, we also included the remaining GLOBE dimensions: Uncertainty avoidance, Future orientation, Humane orientation, Performance orientation, In-group collectivism, Institutional collectivism, Gender egalitarianism, and Assertiveness. Broadly, these dimensions describe the degree to which the members of a society feel comfortable with uncertainty and ambiguity (Uncertainty avoidance), prefer dealing with the challenges of the present and the future over maintaining strong links with their own past (Future orientation), reward individuals for being fair, altruistic and kind to others (Humane orientation), encourage group members for performance

improvement and excellence (Performance orientation), express pride and cohesiveness in their organizations or family (In-group collectivism), encourage the collective distribution of resources and collective action (Institutional collectivism), minimize gender inequality (Gender egalitarianism), are assertive, confrontational and aggressive in their relationship with others (Assertiveness).

While our analysis mainly focuses on the role of Power distance as a moderator effect for ESG, we will also test our model for the inclusion of all the nine cultural variables, to describe the whole culture of a country, controlling for any potential significant direct effects of each culture's dimension on our dependent variable. We also provide an analysis replacing GLOBE's measures with Hofstede's metrics for cultural dimensions.

4.3.3. Platform-level controls

We include in all our models a set of platform-level variables, measured annually, in each year of platform activity. Platform-level data are based on information available on platform's official websites (both current and past pages accessed using the Wayback Machine internet archive). If the information is missing, the platform's social network profiles and crowdfunding studies are consulted to find the piece of information needed. Security-based crowdfunding involves both equity and debt securities. In security-based crowdfunding, individuals purchase equity securities and become shareholders. In debt crowdfunding, individuals invest in bond-like securities at a fixed interest rate. While there are platforms that only allow entrepreneurial ventures to raise capital through equity crowdfunding, other platforms trade debt securities as well. Accordingly, we build a dummy variable (*Debt*), equal to one if the platform list also debt securities, zero otherwise. Because some platforms offer different types of crowdfunding services, we set a dummy variable (*Hybrid platform*) identifying the platforms that, in addition to security-based crowdfunding, offer further typologies of crowdfunding, like donation, reward-based, or peer-to-peer lending. To control for platform heterogeneity across sectors, we build a dummy variable (*Industry specialized*) equal to one for all the platforms which are active in specific industries (e.g., real estate, healthcare, green projects) and

zero in other cases. We also include a variable that considers competition each year. We consider that crowdfunding platforms do not survive over time without investors. We thus include the natural logarithm of the total number of registered investors in each platform per year (*Investors*). The number of yearly investors is taken from the information made available by the platform, either directly from the platform's official website or by consulting the platform's annual reports and infographics.

4.3.4 Regional-level controls

We also include two regional variables, measured annually, in each year of platform activity. We refer to large regions at territorial level 2, as defined by the OECD. In principle, the geographical distance from the funded project region should cease to matter to crowdfunding investors, since an almost costless internet connection facilitates the matching of funds sources and uses beyond geographical borders. Nevertheless, previous studies on the geographical distribution of investors (e.g., Guenther et al., 2018; Hornuf et al., 2022a) provide clear evidence of the still present sensitivity of investors to the distance between them and the funded initiative in security-based crowdfunding. We control for competition among platforms, by setting a variable (*Competing platforms*) measuring the number of active platforms in the same region of one platform each year. To measure the size of a region's economy, we employ the regional GDP per capita (*GDP per capita*) from OECD.Stat.⁴

[Insert Table 1 here]

4.4. Descriptive statistics

Table 2 reports descriptive statistics of the variables employed in our main analysis. 63% of the platforms are active as of December 31, 2020. The mean value of ESG is 1.41, ranging from 0 to 12. This means that most of the platforms include a few ESG criteria in the selection of businesses to list

⁴ We focus more specifically on international flows and M&As in Section 5.6.

online. Among the components, the highest mean value is that of G (0.61), followed by E (0.43) and S (0.37). As far as Power distance is concerned, there is large variability across countries, as the metric ranges from 2.04 to 4.35, with an average of 2.63. As regards platform-level variables, almost half (47%) of the platforms offer debt securities, while only about 6% list crowdfunding offerings different from security-based crowdfunding. One-third (28%) of the platforms are specialized in a specific industry. The mean value of market participation is 3.36, meaning that the average number of investors is between the range of 501 and 1,000 investors per year. Concerning regional-level controls, there are on average 12 active platforms in the same region each year and the mean value of GDP per capita is 52.7 k\$. Platforms with ESG below the median are less likely to survive over time, display lower levels of power distance, higher levels of masculinity, longer-term orientation, are more likely to offer debt and be industry specialized, with respect to platforms with ESG levels above or equal to the median. As regards power distance, platforms based in countries with a level of power distance below the median are more likely to survive, have lower individualism, are short-term oriented, have higher levels of indulgence, and experience lower platforms competition, relative to platforms based in countries where power distance is above or equal to the median.

Table 3 reports correlation coefficients among the independent variables employed in our main analysis, also including the Variance Inflation Factors (VIFs), obtained after estimating an ordinary least square (OLS) regression of ESG against all variables. The VIFs for all the variables are below 5, and the average is well below 2.5, which are the commonly agreed thresholds, indicating that multicollinearity is not a severe concern in our analysis. Given the low values of our VIF that the correlation matrix shows moderate collinearity among the Hofstede GLOBE's cultural dimensions, we perform an additional robustness analysis with orthogonalized variables, generated using a Gram-Schmidt procedure (Golub and Van Loan, 2013), yielding qualitatively similar results.

[Insert Table 2 and Table 3 here]

4.5. Model

We estimate a platform's likelihood of termination considering the time elapsed since its launch. This is modeled by estimating proportional hazards, i.e., the probability that a given scenario occurs at a given time, provided that it has not occurred before that time. We do so by employing a shared-frailty Weibull proportional hazard model fitted using maximum likelihood. In our setting, platforms that survive beyond December 31, 2020, correspond to the right-censored observations. The event year is the termination year if the platform experiences one of the termination scenarios described. The time to occurrence of a termination event is measured starting from the year of the platform launch, as reported on the platform's official website.

The shared-frailty model is a generalization of the proportional hazard model and includes a random effect term representing the heterogeneity of frailty or proneness to termination (Clayton, 1978; Clayton and Cuzick, 1985). Shared-frailty modeling is used with multivariate survival data where observations are independent and conditional to a group-specific unobserved quantity. The common value of this unobserved quantity creates a dependence between the group members (Hougaard, 1986). Frailties are therefore common (or shared) among groups and generate dependency between the survival times of the observations, which are conditionally independent given the frailty (Sahu et al., 1997). By absorbing unobserved heterogeneity at a group level, any remaining biases are minimized. We use shared-frailty modeling to account for unobserved heterogeneity, that is, an omitted common factor that varies only across platforms. Observations within platform i share the same random effect term f_i , such that platforms with random effect $f_i < 1$ ($f_i > 1$) are 'less prone to termination' ('more prone to termination') and have decreased (increased) hazard rates. f_i is gamma distributed with mean one and variance θ . The gamma distribution is chosen for mathematical convenience. Gamma random effects can be integrated from the conditional survival likelihood function, leading to a marginal log-likelihood function that contains only parameters of interest and can easily be estimated using maximum likelihood.

Our model is specified as follows:

$$h_{ij}(t) = f_i \exp \left(\beta_1 ESG_{ij} + \overline{\gamma_1} \overline{Platform - level Controls}_{ij} + \overline{\gamma_2} \overline{Regional - level Controls}_{ij} \right) pt^{p-1}$$

where, $h_{ij}(t)$ is the estimated proportional hazard for platform i in year j , f_i is the frailty shared by each platform i , and p is the estimated shape parameter. We investigate ESG_{ij} , the main explanatory variable, whose effect is estimated by β_1 . Vectors $\overline{\gamma_1}$, and $\overline{\gamma_2}$ are the coefficients estimated with respect to the variable included in $\overline{Platform - level Controls}_{ij}$, and $\overline{Regional - level Controls}_{ij}$, respectively. Fixed-year effects for the establishment of the crowdfunding platform are included to control for generalized increases in ESG levels.

In the model, a lower hazard corresponds to a higher survival profile. For ease of interpretation, we change signs and report coefficients instead of hazard ratios in the results. A positive coefficient indicates that an increase in each variable makes the survival profile higher (and a platform termination is less likely). Conversely, a negative coefficient indicates that an increase in the explanatory variable makes the survival profile lower (and a platform termination more likely). Assessing the significance of ESG in this model will allow us to test our Hypothesis 1.

To test our Hypothesis 2, namely the moderating effect of GLOBE's power distance on the relationship between ESG and the likelihood of platform survival, we run a regression with the interaction between power distance and ESG. If the interaction term is significant, then power distance is moderating the relationship between ESG and platform termination.

5. Results

5.1. Univariate analysis

To investigate the impact of ESG on the survival profile of crowdfunding platforms, we plot in Figure 2 the Kaplan-Meier curves for the survival profile of security-based platforms, dividing the sample

into two groups, i.e., platforms with ESG level below the median value and platforms with ESG level equal or above the median (median value of ESG equal to 1). Equal precision confidence bands are computed for each group at a 95% confidence level (Nair, 1984). We find that the two bands start diverging starting from the second year onwards. Such difference is statistically significant, suggesting a positive relationship between the level of ESG and the survival profile of crowdfunding platforms. The Kaplan-Meier curves, therefore, support Hypothesis 1.

[Insert Figure 2 here]

5.2. Multivariate analysis

The univariate analysis does not control for systematic differences across platform-level characteristics and regional-level characteristics. Table 4 reports our results on how covariates affect the likelihood of a security-based crowdfunding platform to survive over time. Model 1 is our baseline specification, in which we control for platform-level and regional-level controls. To test Hypothesis 1, we add our main measure for ESG in Model 2.

The relationship between ESG and the survival profile of crowdfunding platforms is positive and statistically significant at a 1% level, as reported in Model 1. The coefficient for *ESG* is equal to 0.422 (hazard ratio equal to 1.52) and implies that for one standard deviation change in ESG, there would be an increase in the platform's likelihood to survive in a period of 98%. Therefore, we find evidence of the direct positive effect of a higher level of ESG in the criteria adopted by the platform in the selection process on their survival profile, as stated in our Hypotheses 1.

As far as the control variables are concerned, Platforms that are specialized in a specific industry are more likely to survive over time ($p < 0.05$ in Model 1, $p < 0.01$ in Model 2, $p < 0.10$ in Model 3, $p < 0.05$ in Model 4). Platforms entirely dedicated to a specific industry target a pool of potential funders that might have interest and expertise in such an industry. Investors on industry-specialized platforms might therefore be more sophisticated than the average crowdfunding investor and more

capable of assessing the risk of investing in crowdfunding projects, positively impacting the survival of the platform. Market participation is positively related to platform survival ($p < 0.01$ in all models). This result, combined with evidence from previous studies (Cumming et al., 2019a; Meoli et al., 2022) shows that a larger number of funders is positively associated with the performance of the platform.

In the following columns of Table 4 (Model 3-6), we show how our results are robust when the relationship is tested by using different measures of ESG. In Model 3, ESG is a score obtained by following the methodology defined in the study by Mansouri and Momtaz (2022). By employing the machine learning tool provided by the authors (www.SustainableEntrepreneurship.org), we quantify the extent to which a platform includes ESG criteria in the selection of businesses, using text data disclosed by the platform. In Model 4, ESG is a dummy variable equal to 1 if at least one environmental, social, or governance issue is included in the selection criteria of the platform. In Model 5, ESG is a count variable corresponding to the number of ESG components included in the selection criteria adopted by the platform. In Model 6, ESG is the residual from a regression where the platform ESG score is regressed against the World Bank's policy and institutions for environmental sustainability country rating. This test allows us to disentangle the ESG component which is effectively due to the platform-specific orientation, avoiding overlap with country-specific effects. Results concerning our hypotheses are robust for alternative measures of ESG. All models confirm the significance of our findings, with a lower level of significance in Model (3), where the coefficient is statistically significant at less than 10%, and in Model (6), where the coefficient is significant at less than 5%.

[Insert Table 4 here]

5.3. Mechanisms

After testing the impact of ESG in our baseline model, we try to disentangle whether platform survival is a direct effect of the implementation of ESG criteria or because of indirect effects. In the survival context, a recent contribution to the analysis of mediating models (Discacciati et al., 2019) proposes an econometric technique to decompose the overall effect of an exposure (ESG in our context) on a certain outcome (platform survival) in four components that correspond to the fraction of the effect that is due to: a) the mediating effect (namely, the increase in platform survival due to the increase in investors); b) the moderating effect (namely, the increase in platform survival due to the fact that the number of investors boosts the impact of ESG criteria); c) to both the mediating and the moderating effect (namely, the increase in platform survival due to the fact that the increase in the number of investors boosts the impact of ESG criteria); d) the direct effect (namely, the direct impact of ESG on survival, independent from the moderating and mediating effect of investors). This four-way decomposition unifies methods to attribute effects to interactions and methods that assess mediation.

In Table 5 we present the outcome of our analysis where we test whether the overall effect of ESG on platform survival is mediated and/or moderated by the number of investors participating at a given time in a platform, by using the method by Discacciati et al. (2019). According to this approach, two regression models are fitted: a model for the mediator (Model 1), namely the number of investors, as a function of ESG and all other control variables; a survival model (Model 2), as a function of the exposure (ESG), the mediator (Investors), and all other control variables. The variance-covariance matrix of the estimated components is obtained using the nonparametric bootstrap.

The coefficients in Panel A highlight the significance of ESG, at a 1% level, in the mediator model, and the significance of both ESG and Investors in the survival model. Among controls, Industry specialization is strongly significant as in Table 4, while we find weak evidence of the significance of Debt. Panel B provides the decomposition of the effect of ESG on survival. We find evidence that the mediating effect and the direct effects are significant in determining the increased

platform survival. This means that, on the one hand, ESG criteria increase the number of participating investors, which ultimately has an impact on platform survival. On the other hand, after taking into account this mediating effect, we are still left with a direct effect of ESG on platform survival, likely to be due to project selection and better fit between investors and projects. We are indeed aware that there might be multiple mediating effects at work, but identifying empirical evidence on the increase of investors following the implementation of ESG criteria helps us shed light on how the ESG-Survival mechanism operates.

[Insert Table 5 here]

5.4. *Power distance*

In Table 6 we replicate our analysis when taking into account the GLOBE's measure of power distance. However, as some researchers have criticized the measurement of values in the GLOBE study (Hofstede, 2006; Maseland and Van Hoorn, 2009), we replicate our analysis using different indices of cultural values. In practice, we test the relationship in four models: 1) by including the interaction of GLOBE's measure of power distance with ESG; 2) as in Model 1, when including all GLOBE's cultural dimensions; 3) by including the interaction of Hofstede's measure of power distance with ESG; 4) as in Model 3, when including all Hofstede's cultural dimensions. In all models, the coefficient of ESG is confirmed to be positive, at less than 5% in Model 2, at less than 1% in all other models.

By testing the interaction between Power distance and ESG, we find that Power distance contributes to the moderating relationship between the level of ESG in the selection criteria adopted by platforms and their survival. As the interaction term, $ESG \times Power\ distance$ is positive and significant at less than 1% in all models, we find support for Hypothesis 2. The coefficient of $ESG \times Power\ distance$ ranges from -0.268 in Model 1 to is equal to -0.378 in Model 2. In terms of economic impact, if we use the -0.268 estimate in Model 1, if the mean value of GLOBE's measure of power

distance is decreased (increased) by one standard deviation, a 107% (91%) increase in a platform's likelihood to survive in a period is associated with a one standard deviation change in ESG. Given that ESG commitment poses a binding constraint that may restrict entrepreneurial agility and therefore depress financial performance (Barber et al., 2021; Cornell, 2021), ESG criteria are particularly important for platforms for cultures of low power distance, where entrepreneurs are more likely to have regard for stakeholders and the broader society.

When testing for the role of all cultural dimensions, we find that *Uncertainty avoidance* is also negatively related to the dependent variable ($p < 0.10$ in Models 2 and 4), meaning that platforms are more likely to survive when based in countries where uncertainty avoidance is lower. There is high uncertainty regarding the possibility to get financial returns on investments in security-based crowdfunding in the short-run, due to the base of liquid secondary markets and the small opportunities to get dividends. For this reason, individuals with high uncertainty avoidance are less likely to invest in crowdfunding platforms. Among other GLOBE measures, we find evidence of a positive impact of *Performance orientation* ($p < 0.10$ in Model 2), and a negative effect of *Assertiveness* ($p < 0.05$ in Model 2). Among Hofstede's measures, *Masculinity* is negatively related to the survival of crowdfunding platforms ($p < 0.10$ in Model 4). These results are in line with our expectations, given that the crowd is by definition a cooperative effort to support entrepreneurial ventures.

[Insert Table 6 here]

5.5. Endogeneity concerns

In this section, we present the results of additional tests aimed to check the robustness of our results to endogeneity concerns, possibly because platforms considering ESG criteria might be those of higher quality. While the common explanation for why companies address ESG issues is that doing so enhances the profitability and firm value (e.g., Edmans 2011; Lins et al., 2017), other studies consider the inverse, that well-performing firms are more likely to afford ESG issues (e.g., Hong et

al., 2012). Therefore, the effect of ESG on the survival profile of the platform might be dependent on platform's quality. This is why we control for platform's quality and implement an instrumental variable setting.

Table 7 reports the results of our test tackling potential endogeneity concerns in the relationship between ESG and platform survival. First, we enrich our analysis by controlling for the level of satisfaction of platforms' users. We include the *TrustScore* control variable, a score retrieved from TrustPilot (www.trustpilot.com), an online review platform where customers can leave a one to five stars rating, as well as a written review, to companies. Each time a new review is posted, Trustpilot calculates the TrustScore, which is an overall rating based on all the reviews. The data are available for 279 platforms in our sample. We use Wayback Machine to reconstruct TrustScore in past years. Controlling for the quality of the platform, proxied by customers' satisfaction captured by TrustScore, we confirm that the relationship between ESG and the survival profile of crowdfunding platforms is positive and statistically significant at a 1% level (Models 1). The moderating effect of *Power distance* on the relationship between ESG and the survival of the platform is confirmed as well, at a 5% significance level, as shown in Model 2. Therefore, our main results are robust.

Second, we implement an instrumental variable setting. Crifo et al. (2017) instrument the ESG score in a given country either by using the number of ISO 14001 certificates in a given year in a given country or by Incarceration rate (Prisoners per 100,000 population), in a given year in a given country. We tried to implement both instruments assessing validity according to Wooldridge (2005), regressing each platform ESG score by ISO 14001 certificates and by Incarceration rate, matching the platform country and the observed year, and all other controls. In a first-stage regression (instrumental regression), we regressed ESG against the two instruments and our full set of controls. In this model, the coefficient for Incarceration rate is negative and strongly significant, suggesting that ESG is higher in those countries where Incarceration rate is lower; by contrast, the number of ISO 14001 certificates is not significant in our analysis and is therefore dropped. Thus, we

implemented the methodology provided by Meoli et al. (2022): we fitted ESG scores from our first-stage regression, against the incarceration rate (statistically significant at less than 1 percent) and the full set of controls. Then, we included the residuals from this regression in our second-stage model (survival regression). In Model 3 we show the robustness of our main result on the role ESG, while in Model 4 we confirm the robustness of the interaction between ESG and Power distance, when endogeneity is assessed through instrumental variables.

[Insert Table 7 here]

5.6. Mergers and Acquisitions

In our main analysis, we identify three scenarios to define platform survival, including the in the terminations the cases in which a platform is acquired by another platform. However, this is not necessarily a negative event, as it might provide an advantageous exit option to the founders of the platform. For this reason, we investigate more in-depth the 9 cases of termination in our sample due to acquisitions. We find that in all but one case, target platforms ceased to exist as independent portals and were absorbed so as to operate under the same name as the acquirer. The only acquisition deal where the target platform continued to operate independently is the French platform Fundimmo, acquired by Froncière Atland in 2017. We therefore assume that crowdfunding platforms resulting from acquisition deals are typically the continuation of the acquirers. Thus, the event of a platform acquisition is likely to be associated with the termination of the target platform. To better substantiate our analysis, we perform a robustness test in which we exclude acquired platforms as censored survivors. Our main results did not significantly change (see Models 1 and 2 in Table D1 in the Appendix).

5.7. International flows

An important feature of digital finance is its capacity for instant cross-spatial information dissemination. Low communication costs facilitate better information gathering and progress

monitoring for distant online investors, thus diminishing the importance of geographical distance, and gradually reducing geographical boundaries. Equity crowdfunding, more broadly digital finance markets, is therefore expected to increase geographical inclusivity (Agrawal et al., 2014; Buttice and Vismara, 2022). Nevertheless, previous studies have documented a strong “local bias” (also called “home bias”) with a clear tendency by crowdfunding investors to finance geographically proximate ventures (see, e.g., Guenther et al., 2018; Hornuf et al., 2022a, Bade and Walther, 2021). Since crowdfunding regulation still largely differs across jurisdictions, cross-country investments in security-based crowdfunding are still rare. The UK platform Crowdcube, which is the largest and most international platform in our sample, reports that 12% of their raises are based outside the UK.⁵ Cross-border investments in the Finnish platform Invesdor, which is the first recipient of the MiFID license enabling cross-border investments in crowdfunding, amount to 8.5% of the investments (Maula and Lukkarinen, 2022). Since over 90% of the investments in security-based crowdfunding are still made domestically (Buttice and Vismara, 2022; Ziegler et al., 2020), we believe that international flows and cross-national activities in crowdfunding are unlikely to influence our theory and empirical tests. We nevertheless perform a robustness test by identifying 12 platforms in our sample that have initiated an internationalization process by making available in their portal investments in different currencies. By excluding these platforms from the sample, results are confirmed at a similar level of significance (see Models 3 and 4 in Table D1 in the Appendix).

5.8. ESG decomposition and dynamics

In our main analysis, we have documented that platforms with higher levels of ESG criteria are more likely to survive over time. However, ESG is an umbrella term, capturing many different factors. In this Section, we take a more granular approach and distinguish the three components of ESG. In particular, while the G component mainly refers to shareholders, the E and S components are primarily about other stakeholders. Some events or decisions might be positive for the E and/or S

⁵ <https://www.crowdcube.eu/explore/blog/crowdcube/overseas-raises-continue-to-provide-exciting-opportunities?>

components but negative for the G component because they result in agency problems between managers and shareholders (Krüger, 2015). Given that it is central to the functioning of crowdfunding markets, just like other financial markets, the G component is expected to be significant in security-based crowdfunding. The average percentage of equity offered to crowdfunding investors is on average below 10%. Accordingly, most of the firm shares are likely to be held by its proponents, whereas each crowdfunding investor holds a small share. As crowdfunding investors consider becoming minority shareholders, governance concerns arise from the separation between ownership and control (Cumming et al., 2021b). The related agency costs impact security-based crowdfunding also because individual investors have limited incentives to perform due diligence (Ahlers et al., 2015; Cumming et al., 2019) or lack the necessary skills as their financial literacy is often limited (Meoli et al., 2022). Coherently, previous research has already linked specific governance dimensions (i.e. voting rights) to the probability of success of crowdfunding offerings (Cumming et al., 2019b) and to platform survival (Rossi et al., 2019).

Adding the E and S dimensions to the G dimension of security-based crowdfunding is interesting for two reasons. First, as discussed above, crowdfunding investors are more likely to consider not only tangible rewards but also societal ones (Hornuf et al., 2022b; Tenner and Hörisch, 2020; Vismara, 2019). One of the motivations why E and S investments are generally considered by professional investors is linked to the intrinsic difficulty of these investments to provide measurable outputs in the short term, and the consequent higher market uncertainty. To this extent, crowdfunding platforms may play a pivotal role by addressing the governance issues connected to the direct investments of numerous small investors (Cumming et al., 2021b), while allowing individual investors to identify personally with the ventures in which they invest. Further, E and S criteria are relevant for investors' identification in ventures and platforms reflecting their values.

The second reason for interest in the different components of ESG relates to how investors can impact their investments. According to Edmans (2022), they can achieve impact through two

channels: exit and voice. Exit involves the threat of divesting from non-ESG ventures, inducing them to consider ESG factors to avoid being sold (Edmans et al., 2022). This “exit” possibility is available also in traditional investments. “Voice” refers instead to investors’ engagement. Relative to alternatives, crowdfunding platforms provide more opportunities for dialogue between fundraisers and investors. The support and feedback of the “crowd” both in the development and promotion of products and services is indeed considered an important factor for the success of crowdfunding (Dorfleitner et al., 2018). Such communication is bidirectional. Ventures can voluntarily communicate with their investors by posting updates, and investors can ask questions and demand information and updates from entrepreneurs both during and after the campaigns. The stronger communication channels between ventures and investors enabled by crowdfunding platforms might enhance the chances that the “voice” of investors sensitive to E and S factors is “heard”.

Empirically, we first assess the impact of each of the three ESG components on the survival profile of crowdfunding platforms; and second, we consider the evolution of the relationship between the three ESG components and survival profile over time. Models 1, 2, and 3 of Table 9 report regression coefficients for environmental, social, and governance, respectively. All decomposed ESG components are statistically significant at 1% level in these models. The coefficient with the highest magnitude is estimated for G, as a one-SD-increase in G would decrease the termination rate by 71%. The same effect can be reached by a 1.25-SD increase in S, and a 1.32-SD increase in E. In Model 4, we test the effect of the three ESG components simultaneously. In this case, we find that only governance (1.252) and social (0.446) components are statistically significant. In particular, the governance component is significant at the 1% level, while the social component is less significant ($p < 0.10$). Not surprisingly, the governance dimension plays the most important role in a platform’s survival. This reflects their role in the governance of digital investments (Cumming et al., 2021b).

When considering the time dynamics, it is evident from Figure 3 that, in fact, the average level of ESG has sharply increased in recent years. To assess how the time trend has affected the

relationship between E, S, G and time, in Models 5, 6 and 7 we interacted with each of the components with a Time trend, while in Model 8 the three interactions are jointly tested. Results show that E has increased its importance over time. As mentioned above, the relevance of governance issues has been highlighted by early research on security-based crowdfunding. Our empirical results, in these respects, are confirmative of how this issue has been of central importance for investor decisions. By contrast, the relevance of environmental issues has been more debated over time, with early research (e.g., Hörisch, 2015) unable to empirically validate the link between environmental orientation and success. Our results, therefore, provide new evidence on the relationship between environmental issues and crowdfunding, documenting that, in recent years, the implementation of environmental criteria in the selection of crowdfunding projects ultimately affected the survival of platforms.

[Insert Table 8 and Figure 3 here]

6. Conclusions

6.1. Synthesis of results and contributions

This paper investigates the role of ESG in Fintech using as an empirical setting the population of 508 security-based crowdfunding platforms in the 38 OECD countries, observed over the period from 2007 to 2020. Our study provides significant results of higher survival profiles for platforms that consider ESG criteria in the selection of businesses. The mechanisms through which ESG criteria impact the prospects of crowdfunding platforms are both direct and indirect. ESG criteria increase the number of participating investors, which ultimately has an impact on platform survival. However, after taking into account this mediating effect, there is still a direct effect of ESG on platform survival, likely to be due to project selection and better fit between investors and projects. The inclusion of ESG criteria in the selection of businesses matters most for platforms operating in countries with low power distance. When decomposing the effect of the three factors, we observe that the governance dimension plays the most important role, while the environmental factor has increased its importance

over time. These results highlight the role of sensitivity to sustainability issues and societal responsibility in influencing financial decision-making in security-based crowdfunding.

The present study contributes to the existing literature in three important ways. First, we extend research on fintech by providing a dynamic perspective on the security-based crowdfunding industry and the role of ESG in this market. As discussed above, our approach focuses on the ESG criteria to admit businesses to be listed on crowdfunding platforms. We find that 43% of security-based crowdfunding platforms consider ESG. However, the median platform includes one specific ESG factor in the selection of businesses, among the twelve ESG issues identified in our methodology. Only 7% of the platforms cover more than six ESG factors. Accordingly, the role played by digital platforms and the ESG criteria they adopt in selecting businesses highlight their relevance in the matching between demand and supply or risk capital. With few exceptions (e.g., Cumming et al., 2019; Löher, 2017; Kleinert et al., 2021), previous studies have overlooked their function.

Second, we extend crowdfunding literature by providing first-time evidence on the role of ESG in the survival profile of security-based crowdfunding platforms. Despite the growing popularity of the phenomenon, we know little about the evolution of crowdfunding markets over time. By taking a dynamic perspective, we document that crowdfunding platforms are frequently terminated, with one out of three platforms established between 2007 and 2020 already closed (36%). While previous literature has identified a positive effect of financial literacy on the survival profile of platforms, moderated by governance mechanisms (Meoli et al., 2022), our study extends previous research and better our understanding of when platform-level, as well as country-level characteristics, create the condition for the development of the crowdfunding market. Among the 187 platform terminations, 111 platforms do not include ESG criteria in the selection of businesses (59%). The univariate analysis provides empirical support for a positive relationship between the inclusion of ESG criteria at platform level and the survival profile of crowdfunding platforms. Considering differences across

countries, the multivariate analysis further details such a positive relationship, showing that power distance negatively moderates such a relationship.

Third, we contribute to ESG literature that has so far neglected ESG components in crowdfunding. Given that sustainable entrepreneurship's historical emergence is tied to entrepreneurial opportunities that emerge to prevent environmental degradation (e.g., Cohen and Winn, 2007; Dean and McMullen, 2007), most of the work on sustainability in security-based crowdfunding is limited to environmental impact. In our paper, we shift from an almost exclusive focus on environmental sustainability (Hörisch, J., 2015; Hornuf et al., 2022b; Vismara, 2019) to the study of ESG factors. Specifically, we confirm that the environmental component of ESG alone is significantly positively correlated to the survival profile of crowdfunding platforms. Yet, testing the effect of the three components together, we find that the governance component is the most significant component. When analyzing the dynamics over time, however, we find that environmental orientation has increased its relevance over time. This finding brings together and contributes to explaining the results of previous studies on environmental sustainability (Hörisch, J., 2015; Hornuf et al., 2022b; Vismara, 2019) and governance of crowdfunding (Cumming et al., 2019a; 2019b; Rossi et al., 2019; Walthoff-Borm et al., 2018).

6.2. Implications for practice and policy

Our study has important practical implications on both the demand and supply sides of capital, as well as for matchmaking platforms. Our results point indeed towards three potential implications: (1) a community of crowdfunding investors, (2) improved skills of employees at platforms to do due diligence, and (3) positive externalities across entrepreneurs. First, our empirical analysis identified a mechanism linking ESG to platform survival through the increase in participating investors, implying that ESG factors appeal and attract to crowdfunding a broad set of investors, which brings about greater participation in projects listed on fintech platforms due to the emotional connection extending beyond the returns and rewards. Our analysis shows that the relationship between ESG and

platform survival is valid also once the increase in investors has been controlled, implying effects on other classes of stakeholders, such as platform employees and entrepreneurs. Therefore, second, we argue that ESG mandates enable an improvement in fintech platform due diligence, thereby reducing the frequency of lower-quality entrepreneurs entering fintech platforms. And third, ESG harmonizes the community of entrepreneurs that benefit from positive externalities associated with other entrepreneurial projects on the platform. This is directly relevant to entrepreneurs but also indirectly to platform managers. We acknowledge, however, that the functioning of crowdfunding platforms as well as the relevance of ESG factors should be contextualized. We find indeed that country-level power distance makes it harder to bring about ESG benefits to fintech, since a hierarchical community structure engenders less community engagement in projects with positive spillovers to other entrepreneurs and society more broadly.

Our paper carries also policy implications. Crowdfunding regulation still largely differs across countries (Cumming and Johan, 2013; Hornuf and Schwienbacher, 2017; Rossi and Vismara, 2018; Rossi et al., 2019; Rossi et al., 2021). However, in October 2020, the European Parliament made the first step to facilitate harmonizing crowdfunding markets by allowing crowdfunding platforms to apply for an EU passport based on a single set of rules (European Commission, 2019). To facilitate transparency with investors and entrepreneurs, the European Commission has pointed out the necessity for platforms to make information regarding crowdfunding project selection clear and available on the online platform. Our evidence contributes to a better understanding of how the inclusion of ESG criteria impacts the development of platforms that operate in countries with different levels of power distance. By documenting the role of culture in the relationship between ESG criteria and platform survival, we also offer insights for platform managers, who are in charge of design policies that ensure that projects are selected transparently.

6.3. Limitations and future research directions

Some limitations of this study open opportunities for future research. First, although our paper finds evidence of a correlation between ESG criteria and the survival profile of security-based crowdfunding platforms, there is insufficient evidence to support a robust causal relationship. There might be biases due to uncontrolled confounding variables. ESG criteria could be endogenous. If there are unobserved platform characteristics correlated to both the survival profile of crowdfunding platforms and the level of ESG criteria, then the estimates of our model could be biased. Platforms that consider ESG criteria might indeed be those of higher quality and more likely to survive over time. In our study, we addressed endogeneity problems by performing an additional analysis that controls for the level of satisfaction of platforms' users, as a proxy of platform quality. Future research could explore alternative research designs to improve the robustness of causal inference in terms of correlations associated with the unobserved quality of the platform.

Second, we find that the importance of ESG criteria is more pronounced for those platforms operating in countries where the level of power distance is lower. Since most equity crowdfunding investments are still made domestically, the very limited international flows on crowdfunding platforms are not likely to influence our theory. However, policymakers and platform managers are increasingly interested in enabling cross-country investments in crowdfunding. In December 2022, the European Parliament made the first step to facilitate harmonizing crowdfunding markets by allowing crowdfunding platforms to apply for an EU passport based on a single set of rules. Policymakers are therefore paving the way for an increased volume of cross-border equity crowdfunding. Crowdfunding platforms might soon establish a presence in multiple countries organically or through mergers. The internationalization of equity crowdfunding can open new research avenues, including whether and how our theorizing about the moderating role of power distance is affected by cross-national activities.

Third, security-based crowdfunding platforms are the unit of observation of our paper. Despite being the “gatekeepers” of crowdfunding, platforms have so far received little attention from the literature. Our paper provides a relevant contribution to understanding their prospects and their dynamics. Future studies can investigate whether changes in the (ESG) selection criteria being used by platforms affect (1) the demand side, in terms of the nature and performance of the ventures that they list, and (2) the supply side, in terms of the composition of their investor audience. For instance, a project-level study can better our understanding of whether platforms’ ESG claims are simply marketing or reflect a real change in selection focus. Are crowdfunding platforms “walking the walk” or just “talking the talk”?

This aspect carries broad implications. The above-mentioned European Directive aims at facilitating cross-country crowdfunding investments and at increasing platforms’ transparency with investors and entrepreneurs. The European Commission has indeed pointed out the necessity for platforms to make information regarding crowdfunding project selection clear and available on the online platform. This is particularly stringent if we consider that investors often do not attend to signals that are easily observable on the crowdfunding portals (Butticè et al., 2022) and that platforms have been found to manipulate the information that they display online to attract more investments (Meoli and Vismara, 2021). Our evidence contributes to a better understanding of how the inclusion of ESG criteria impacts the development of platforms that operate in countries with different levels of power distance. By documenting the role of culture in the relationship between ESG criteria and platform survival, we also offer insights for platform managers, who are in charge of design policies that ensure that projects are selected transparently.

Our perspective looks at ESG criteria to understand the prospects of crowdfunding platforms and, ultimately, whether ESG drives long-term value. This is important given the current miscommunication and politicization of ESG. The related pressure might tempt companies, including crowdfunding platforms, to “greenwashing”, as well as researchers to “competence greenwashing”

(Schumacher, 2020). ESG is sometimes approached ideologically in a polarized debate (Edmans, 2022). Kahan (2015) shows that the more we associate an issue with an identity (such as ESG “believer”), the more people base their view on our identity than our arguments. We hope that our findings contribute to developing the understanding of ESG based on evidence.

References

- Agrawal, A., Catalini, C., Goldfarb, A., 2014. Some Simple Economics of Crowdfunding. *Innovation Policy and the economy* 14(1), 63-97. <https://doi.org/10.1086/674021>
- Ahern, K.R., Daminelli, D., Fracassi, C., 2015. Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics* 117(1), 165–189. <https://doi.org/10.1016/j.jfineco.2012.08.006>
- Ahlers, G.K.C., Cumming, D., Günther, C., Schweizer, D., 2015. Signaling in Equity Crowdfunding. *Entrepreneurship Theory and Practice* 39(4), 955–980. <https://doi.org/10.1111/etap.12157>
- Bade, M., Walther, M., 2021. Local preferences and the allocation of attention in equity-based crowdfunding. *Review of Managerial Science* 15, 2501–2533. <https://doi.org/10.1007/s11846-020-00429-6>
- Baldini, M., Maso, L.D., Liberatore, G., Mazzi, F., Terzani, S., 2018. Role of Country- and Firm-Level Determinants in Environmental, Social, and Governance Disclosure. *Journal of Business Ethics* 150, 79–98. <https://doi.org/10.1007/s10551-016-3139-1>
- Barber, B.M., Morse, A., Yasuda, A., 2021. Impact investing. *Journal of Financial Economics* 139(1), 162–185. <https://doi.org/10.1016/j.jfineco.2020.07.008>
- Baum, J.A.C., Silverman, B.S., 2004. Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing* 19(3), 411–436. [https://doi.org/10.1016/S0883-9026\(03\)00038-7](https://doi.org/10.1016/S0883-9026(03)00038-7)
- Belleflamme, P., Lambert, T., Schwienbacher, A., 2014. Crowdfunding: Tapping the right crowd. *Journal of Business Venturing* 29(5), 585–609. <https://doi.org/10.1016/j.jbusvent.2013.07.003>
- Bento, N., Gianfrate, G., Groppo, S.V., 2019a. Do crowdfunding returns reward risk? Evidences from clean-tech projects. *Technological Forecasting and Social Change* 141, 107–116. <https://doi.org/10.1016/j.techfore.2018.07.007>
- Bento, N., Gianfrate, G., Thoni, M.H., 2019b. Crowdfunding for sustainability ventures. *Journal of Cleaner Production* 237, 117751. <https://doi.org/10.1016/j.jclepro.2019.117751>
- Block, J.H., Colombo, M.G., Cumming, D.J., Vismara, S., 2018. New players in entrepreneurial finance and why they are there. *Small Business Economics* 50, 239–250. <https://doi.org/10.1007/s11187-016-9826-6>
- Block, J.H., Groh, A., Hornuf, L., Vanacker, T., Vismara, S., 2021. The entrepreneurial finance markets of the future: a comparison of crowdfunding and initial coin offerings. *Small Business Economics* 57(2), 865-882. <https://doi.org/10.1007/s11187-020-00330-2>
- Bodrožić, Z., Adler, P. S., 2022. Alternative futures for the digital transformation: A macro-level Schumpeterian perspective. *Organization Science* 33(1), 105-125. <https://doi.org/10.1287/orsc.2021.1558>
- Bruton, G., Khavul, S., Siegel, D., Wright, M., 2015. New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice* 39(1), 9–26. <https://doi.org/10.1111/etap.12143>

- Buttice, V., Collewaert, V., Stroe, S., Vanacker, T., Vismara, S., & Walthoff-Borm, X. (2022). Equity crowdfunders' human capital and signal set formation: Evidence from eye tracking. *Entrepreneurship Theory and Practice* 46(5), 1317-1343. <https://doi.org/10.1177/10422587211026860>
- Butticè, V., Vismara, S. (2022). Inclusive digital finance: the industry of equity crowdfunding. *Journal of Technology Transfer* 47(4), 1224–1241. <https://doi.org/10.1007/s10961-021-09875-0>
- Cahill, T.F., Sedrak, M., 2012. Leading a Multigenerational Workforce: Strategies for Attracting and Retaining Millennials. *Frontiers of Health Services Management* 29(1), 3-15.
- Cai, Y., Pan, C.H., Statman, M., 2016. Why do countries matter so much in corporate social performance? *Journal of Corporate Finance* 41, 591–609. <https://doi.org/10.1016/j.jcorpfin.2016.09.004>
- Calic, G., Mosakowski, E., 2016. Kicking Off Social Entrepreneurship: How A Sustainability Orientation Influences Crowdfunding Success. *Journal of Management Studies* 53(5), 738–767. <https://doi.org/10.1111/joms.12201>
- Cambridge Centre for Alternative Finance, 2021. The Global Alternative Finance Market Benchmarking Report. <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/the-2nd-global-alternative-finance-market-benchmarking-report/>
- Chava, S., 2014. Environmental Externalities and Cost of Capital. *Management Science* 60(9), 2223–2247. <https://doi.org/10.1287/mnsc.2013.1863>
- Chowdhry, B., Davies, S.W., Waters, B., 2019. Investing for Impact. *The Review of Financial Studies* 32(3), 864–904. <https://doi.org/10.1093/rfs/hhy068>
- Clayton, D.G., Cuzick, J., 1985. Multivariate Generalizations of the Proportional Hazards Model. *Journal of the Royal Statistical Society. Series A (General)* 148(2), 82–117. <https://doi.org/10.2307/2981943>
- Clayton, D.G., 1978. A Model for Association in Bivariate Life Tables and Its Application in Epidemiological Studies of Familial Tendency in Chronic Disease Incidence. *Biometrika* 65(1), 141–151. <https://doi.org/10.1093/biomet/65.1.141>
- Coakley, J., Lazos, A., Linares-Zegarra, 2022. Seasoned equity crowdfunded offerings. *Journal of Corporate Finance* 77, 101880. <https://doi.org/10.1016/j.jcorpfin.2020.101880>
- Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing* 22(1), 29-49. <https://doi.org/10.1016/j.jbusvent.2004.12.001>
- Cornell, B. (2021). ESG preferences, risk and return. *European Financial Management*, 27(1), 12-19. <https://doi.org/10.1111/eufm.12295>
- Crifo, P., Diaye, M. A., Oueghlissi, R., 2017. The effect of countries' ESG ratings on their sovereign borrowing costs. *The Quarterly Review of Economics and Finance*, 66, 13-20. <https://doi.org/10.1016/j.qref.2017.04.011>
- Cumming, D.J., Johan, S., 2013. Demand-driven securities regulation: evidence from crowdfunding. *Venture Capital* 15(4), 361-379. <https://doi.org/10.1080/13691066.2013.847635>

- Cumming, D.J., Johan, S.A., Zhang, Y., 2019a. The role of due diligence in crowdfunding platforms. *Journal of Banking & Finance* 108, 105661. <https://doi.org/10.1016/j.jbankfin.2019.105661>
- Cumming, D. J., Meoli, M., Vismara, S., 2019b. Investors' choice between cash and voting rights: Evidence from dual-class equity crowdfunding. *Research Policy*, 48(8), 103740. doi.org/10.1016/j.respol.2019.01.014.
- Cumming, D.J., Leboeuf, G., Schwienbacher, A., 2020. Crowdfunding models: Keep-It-All vs. All-Or-Nothing. *Financial Management* 49(2), 331–360. <https://doi.org/10.1111/fima.12262>
- Cumming, D.J., Leboeuf, G., Schwienbacher, A., 2017. Crowdfunding cleantech. *Energy Economics* 65, 292–303. <https://doi.org/10.1016/j.eneco.2017.04.030>
- Cumming, D.J., Meoli, M., Vismara, S., 2021a. Does equity crowdfunding democratize entrepreneurial finance? *Small Business Economics* 56, 533–552. <https://doi.org/10.1007/s11187-019-00188-z>
- Cumming, D.J., Vanacker, T., Zahra, S.A., 2021b. Equity Crowdfunding and Governance: Toward an Integrative Model and Research Agenda. *Academy of Management Perspectives* 35(1), 69–95. <https://doi.org/10.5465/amp.2017.0208>
- Davila, A., Foster, G., Gupta, M., 2003. Venture capital financing and the growth of startup firms. *Journal of Business Venturing* 18(6), 689–708. [https://doi.org/10.1016/S0883-9026\(02\)00127-1](https://doi.org/10.1016/S0883-9026(02)00127-1)
- Davis, J.H., Ruhe, J.A., 2003. Perceptions of Country Corruption: Antecedents and Outcomes. *Journal of Business Ethics* 43, 275-288. <https://doi.org/10.1023/A:1023038901080>
- Dean, T. J., McMullen, J. S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1), 50-76. <https://doi.org/10.1016/j.jbusvent.2005.09.003>
- Discacciati, A., Bellavia, A., Lee, J. J., Mazumdar, M., Valeri, L., 2019. Med4way: a Stata command to investigate mediating and interactive mechanisms using the four-way effect decomposition. *International Journal of Epidemiology* 48 (1), 15-20. <https://doi.org/10.1093/ije/dyy236>
- Dorfleitner, G., Hornuf, L., Weber, M., 2018 Dynamics of investor communication in equity crowdfunding. *Electronic Markets*, 28, 523–540. <https://doi.org/10.1007/s12525-018-0294-5>
- Dushnitsky, G., Piva, E., Rossi-Lamastra, C., 2022. Investigating the mix of strategic choices and performance of transaction platforms: Evidence from the crowdfunding setting. *Strategic Management Journal* 43(3), 563–598. <https://doi.org/10.1002/smj.3163>
- Edmans, A., 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics* 101(3), 621–640. <https://doi.org/10.1016/j.jfineco.2011.03.021>
- Edmans, A., 2022. The end of ESG. *Financial Management*. <https://doi/full/10.1111/fima.12413>
- Edmans, A., Levit, D., Schneemeier, J., 2022. Socially responsible divestment. Working paper, London Business School.
- El Ghoul, S., Guedhami, O., Kwok, C.C.Y., Mishra, D.R., 2011. Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance* 35(9), 2388–2406. <https://doi.org/10.1016/j.jbankfin.2011.02.007>

- European Commission, 2019. EU climate benchmarks and benchmarks' ESG disclosures. https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-climate-benchmarks-and-benchmarks-esg-disclosures_en
- Eversole, B.A.W., Venneberg, D.L., Crowder, C.L., 2012. Creating a Flexible Organizational Culture to Attract and Retain Talented Workers Across Generations. *Advances in Developing Human Resources* 14(4), 607–625. <https://doi.org/10.1177/1523422312455612>
- Fama, E.F., French, K.R., 2007. Disagreement, tastes, and asset prices. *Journal of Financial Economics* 83(3), 667-689. <https://doi.org/10.1016/j.jfineco.2006.01.003>
- Faraj, S., Pachidi, S., Sayegh, K. 2018. Working and organizing in the age of the learning algorithm. *Information and Organization*, 28(1), 62–70. <https://doi.org/10.1016/j.infoandorg.2018.02.005>
- Fedele, A., Miniaci, R., 2010. Do Social Enterprises Finance Their Investments Differently from For-profit Firms? The Case of Social Residential Services in Italy. *Journal of Social Entrepreneurship* 1(2), 174–189. <https://doi.org/10.1080/19420676.2010.511812>
- Fisch, C., Masiak, C., Vismara, S., Block, J., 2019. Motives and profiles of ICO investors. *Journal of Business Research* 125, 564-576. <https://doi.org/10.1016/j.jbusres.2019.07.036>
- Fischer, R., 2006. Congruence and functions of personal and cultural values: Do my values reflect my culture's values? *Personality and social psychology bulletin*, 32(11), 1419-1431. <https://doi.org/10.1177/0146167206291425>
- G20 Sustainable Finance Working Group, 2021. G20 Sustainable Finance Working Group. <https://www.g20.org/g20-sustainable-finance-working-group.html>
- Gaddy, B.E., Sivaram, V., Jones, T.B., Wayman, L., 2017. Venture Capital and Cleantech: The wrong model for energy innovation. *Energy Policy* 102, 385–395. <https://doi.org/10.1016/j.enpol.2016.12.035>
- Geczy, C.C., Stambaugh, R.F., Levin, D., 2021. Investing in Socially Responsible Mutual Funds. *Review of Asset Pricing Studies* 11(2), 309–351. doi.org/10.1093/rapstu/raab004
- Gerber, L., Hui, J., 2016. Crowdfunding: How and Why People Participate, pp. 37–64. In “International Perspectives on Crowdfunding. Emerald Group Publishing Limited”, eds. Méric, J., Maque, I., Brabet, J. <https://doi.org/10.1108/978-1-78560-315-020151003>
- Giannetti, M., Yafeh, Y., 2012. Do Cultural Differences Between Contracting Parties Matter? Evidence from Syndicated Bank Loans. *Management Science* 58(2), 365–383. <https://doi.org/10.1287/mnsc.1110.1378>
- Gillan, S.L., Koch, A., Starks, L.T., 2021. Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance* 66, 101889. <https://doi.org/10.1016/j.jcorpfin.2021.101889>
- Gleasure, R., Feller, J. (2016). A rift in the ground: Theorizing the evolution of anchor values in crowdfunding communities through the oculus rift case study. *Journal of the Association for Information Systems* 17(10), 1. <https://doi.org/10.17705/1jais.00439>
- Golub, G.H., Van Loan, C.F., 2013. Matrix computations, Fourth edition. Ed, Johns Hopkins studies in the mathematical sciences. The Johns Hopkins University Press, Baltimore.

- Gomber, P., Koch, J.-A., Siering, M., 2017. Digital Finance and FinTech: current research and future research directions. *Journal of Business Economics* 87, 537–580. <https://doi.org/10.1007/s11573-017-0852-x>
- Guenther, C., Johan, S., Schweizer, D., 2018. Is the crowd sensitive to distance?—how investment decisions differ by investor type. *Small Business Economics* 50, 289–305. <https://doi.org/10.1007/s11187-016-9834-6>
- Guiso, L., Sapienza, P., Zingales, L., 2006. Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives* 20(2), 23–48. <https://doi.org/10.1257/jep.20.2.23>
- Hanges, P.J., Dickson, M.W., 2004. The development and validation of the GLOBE culture and leadership scales. In “Culture, leadership, and organizations: The GLOBE study of 62 societies”. SAGE Publications.
- Hartzmark, S.M., Sussman, A.B., 2019. Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows. *The Journal of Finance* 74(6), 2789–2837. <https://doi.org/10.1111/jofi.12841>
- Hewlett, S.A., Sherbin, L., Sumberg, K., 2009. How Gen Y and Boomers will reshape your agenda. *Harvard Business Review* 87(7-8), 71–76. PMID: 19630257.
- Hofstede, G., 1984. Culture’s Consequences: International Differences in Work-Related Values. In “Cross-cultural research and methodology series; 5”. Sage Publications.
- Hofstede, G., 2006. What did GLOBE really measure? Researchers’ minds versus respondents’ minds. *Journal of International Business Studies*, 37, 882-896. <https://doi.org/10.1057/palgrave.jibs.8400233>
- Hong, H., Kacperczyk, M., 2009. The price of sin: The effects of social norms on markets. *Journal of Financial Economics* 93(1), 15-36. <https://doi.org/10.1016/j.jfineco.2008.09.001>
- Hong, H., Kubik, J., Scheinkman, J., 2012. Financial Constraints on Corporate Goodness (No. w18476). National Bureau of Economic Research, Cambridge, MA. <https://doi.org/10.3386/w18476>
- Hörisch, J., 2015. Crowdfunding for environmental ventures: an empirical analysis of the influence of environmental orientation on the success of crowdfunding initiatives. *Journal of Cleaner Production* 107, 636-645. <https://doi.org/10.1016/j.jclepro.2015.05.046>
- Hornuf, L., Schmitt, M., Stenzhorn, E., 2022a. Does a Local Bias Exist in Equity Crowdfunding: Behavioral anomaly or rational preference? *Journal of Economics & Management Strategy*, 31(3), 693-733. <https://doi/full/10.1111/jems.12475>
- Hornuf, L., Siemroth, C., 2023. A field experiment on attracting crowdfunders. *Economics Letters*, 110928. <https://doi.org/10.1016/j.econlet.2022.110928>
- Hornuf, L., Stenzhorn, E., Vintis, T., 2022b. Are sustainability-oriented investors different? Evidence from equity crowdfunding. *Journal of Technology Transfer* 47, 1662–1689. <https://doi.org/10.1007/s10961-021-09896-9>
- Hornuf, L., Schwiendbacher, A. 2017. Should securities regulation promote equity crowdfunding? *Small Business Economics*, 49, 579–593. <https://doi.org/10.1007/s11187-017-9839-9>
- Hougaard, P., 1986. A Class of Multivariate Failure Time Distributions. *Biometrika* 73(3), 671–678. <https://doi.org/10.2307/2336531>

- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. eds., 2004. Culture, leadership, and organizations: The GLOBE study of 62 societies. Sage publications.
- Huang, Z., Zhu, H. and Brass, D.J., 2017. Cross-border acquisitions and the asymmetric effect of power distance value difference on long-term post-acquisition performance. *Strategic Management Journal* 38(4), 972-991. <https://doi/full/10.1002/smj.2530>
- Kahan, D. M., 2015. Climate-science communication and the measurement problem. *Advances in Political Psychology*, 36, 1–43.
- Kleinert, S., Bafera, J., Urbig, D., Volkman, C.K., 2021. Access Denied: How Equity Crowdfunding Platforms Use Quality Signals to Select New Ventures. *Entrepreneurship Theory and Practice* 46(6), 1626-1657. <https://doi.org/10.1177/10422587211011945>
- Krüger, P., 2015. Corporate goodness and shareholder wealth. *Journal of Financial Economics*, 115, 304–329.
- Lagazio, C., Querci, F., 2018. Exploring the multi-sided nature of crowdfunding campaign success. *Journal of Business Research* 90, 318–324. <https://doi.org/10.1016/j.jbusres.2018.05.031>
- Lehner, O.M., 2013. Crowdfunding social ventures: a model and research agenda. *Venture Capital* 15(4), 289–311. <https://doi.org/10.1080/13691066.2013.782624>
- Liang, H., Renneboog, L. (2017). On the foundations of corporate social responsibility. *The Journal of Finance*, 72(2), 853-910. <https://doi.org/10.1111/jofi.12487>
- Lin, L., X. Geng and A. Whinston, 2001. A new perspective to finance and competition and challenges for financial institutions in the internet era. *Electronic Finance: a New Perspective and Challenges*, 13-25. <http://dx.doi.org/10.2139/ssrn.1187567>
- Lins, K.V., Servaes, H., Tamayo, A., 2017. Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility during the Financial Crisis: Social Capital, Trust, and Firm Performance. *Journal of Finance* 72(4), 1785–1824. <https://doi.org/10.1111/jofi.12505>
- Löher, J., 2017. The interaction of equity crowdfunding platforms and ventures: an analysis of the preselection process. *Venture Capital* 19(1-2), 51–74.
- Mansouri, S., Momtaz, P.P., 2022. Financing sustainable entrepreneurship: ESG measurement, valuation, and performance. *Journal of Business Venturing* 37(6), 106258, doi.org/10.1016/j.jbusvent.2022.106258
- Maseland, R. and Van Hoorn, A., 2009. Explaining the negative correlation between values and practices: A note on the Hofstede–GLOBE debate. *Journal of International Business Studies* 40, 527-532. <https://doi.org/10.1057/jibs.2008.68>
- Maula, M.V.J., Lukkarinen, A., 2022. Attention across borders: Investor attention as a driver of cross-border equity crowdfunding investments. *Strategic Entrepreneurship Journal* 16(4), 699-734. <https://doi.org/10.1002/sej.1424>
- Meoli, M., Rossi, A., Vismara, S., 2022. Financial literacy and security-based crowdfunding. *Corporate Governance: An International Review* 30(1), 27-54. <https://doi.org/10.1111/corg.12355>
- Meoli, M., Vismara, S. (2021). Information manipulation in equity crowdfunding markets. *Journal of Corporate Finance*, 67, 101866. <https://doi.org/10.1016/j.jcorpfin.2020.101866>
- Nair, V.N., 1984. Confidence Bands for Survival Functions With Censored Data: A Comparative Study. *Technometrics* 26(3), 265–275. <https://doi.org/10.1080/00401706.1984.10487964>

- OECD, 2022a. Policy guidance on market practices to strengthen ESG investing and finance a climate transition. OECD Business and Finance Policy Papers, OECD Publishing, Paris, <https://doi.org/10.1787/2c5b535c-en>
- OECD, 2022b. Financing SMEs for sustainability: Drivers, Constraints and Policies. OECD SME and Entrepreneurship Papers, No. 35, OECD Publishing, Paris, <https://doi.org/10.1787/a5e94d92-en>
- Pástor, L., Stambaugh, R.F., Taylor, L.A., 2020. Sustainable investing in equilibrium. *Journal of Financial Economics* 142(2), 550-571. <https://doi.org/10.1016/j.jfineco.2020.12.011>
- Petkova, A.P., Wadhwa, A., Yao, X., Jain, S., 2014. Reputation and Decision Making under Ambiguity: A Study of U.S. Venture Capital Firms' Investments in the Emerging Clean Energy Sector. *Academy of Management Journal* 57(2), 422–448. <https://doi.org/10.5465/amj.2011.0651>
- Ridley-Duff, R., 2009. Co-operative social enterprises: company rules, access to finance and management practice. *Social Enterprise Journal* 5(1), 50–68. <https://doi.org/10.1108/17508610910956408>
- Rinne, T., Steel, G. D., Fairweather, J., 2012. Hofstede and Shane revisited: The role of power distance and individualism in national-level innovation success. *Cross-cultural research* 46(2), 91-108. <https://doi.org/10.1177/1069397111423898>
- Rossi, A., Vismara, S., 2018. What do crowdfunding platforms do? A comparison between investment-based platforms in Europe. *Eurasian Business Review* 8, 93–118. <https://doi.org/10.1007/s40821-017-0092-6>
- Rossi, A., Vismara, S., Meoli, M., 2019. Voting rights delivery in investment-based crowdfunding: a cross-platform analysis. *Journal of Industrial and Business Economics* 46(2), 251-281. <https://doi.org/10.1007/s40812-018-0109-x>
- Rossi, A., Vanacker, T., Vismara, S., 2021. Equity Crowdfunding: New Evidence from US and UK Markets, *Review of Corporate Finance* 1(3-4), 407–453. <https://doi.org/10.1561/114.00000009>
- Sahu, S.K., Dey, D.K., Aslanidou, H., Sinha, D., 1997. A Weibull Regression Model with Gamma Frailties for Multivariate Survival Data. *Lifetime Data Analysis* 3, 123–137. <https://doi.org/10.1023/A:1009605117713>
- Schumacher, K., 2020. “Competence greenwashing” could be the next risk for the ESG industry. *Responsible Investor*. London, UK.
- Shane, S., Cable, D., 2002. Network Ties, Reputation, and the Financing of New Ventures. *Management Science* 48(3), 364–381. <https://doi.org/10.1287/mnsc.48.3.364.7731>
- Signori, A., Vismara, S., 2018. Does success bring success? The post-offering lives of equity-crowdfunded firms. *Journal of Corporate Finance* 50, 575–591. <https://doi.org/10.1016/j.jcorpfin.2017.10.018>
- Stephan, U., Uhlaner, L.M., 2010. Performance-based vs socially supportive culture: A cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies*, 41(8), 1347-1364. <https://doi.org/10.1057/jibs.2010.14>
- Stulz, R.M., Williamson, R., 2003. Culture, openness, and finance. *Journal of Financial Economics* 70(3), 313–349. [https://doi.org/10.1016/S0304-405X\(03\)00173-9](https://doi.org/10.1016/S0304-405X(03)00173-9)

- Tabellini, G., 2010. Culture and Institutions: Economic Development in the Regions of Europe. *Journal of the European Economic Association* 8(4), 677–716. <https://doi.org/10.1111/j.1542-4774.2010.tb00537.x>
- Tenner, I., Hörisch, J., 2020. Crowdfunding Sustainable Entrepreneurship: What Are the Characteristics of Crowdfunding Investors? *Journal of Cleaner Production* 290, 125667. <https://doi.org/10.1016/j.jclepro.2020.125667>
- Testa, S., Roma, P., Vasi, M., Cincotti, S., 2020. Crowdfunding as a tool to support sustainability-oriented initiatives: Preliminary insights into the role of product/service attributes. *Business Strategy and the Environment* 29(2), 530–546. <https://doi.org/10.1002/bse.2385>
- United Nations Principles of Responsible Investment, 2021. United Nations Principles of Responsible Investment Annual Report. <https://www.unpri.org/annual-report-2021>
- Vanacker, T., Vismara, S., Walthoff-Borm., 2019. What happens after a crowdfunding campaign? pp. 227–247. In “Handbook of Research on Crowdfunding”, eds. Hans Landström, Annaleena Parhankangas and Colin Mason. Edward Elgar. <https://doi.org/10.4337/9781788117210.00015>
- Vismara, S., 2019. Sustainability in equity crowdfunding. *Technological Forecasting and Social Change* 141, 98–106. <https://doi.org/10.1016/j.techfore.2018.07.014>
- Vismara, S., 2016. Equity retention and social network theory in equity crowdfunding. *Small Business Economics* 46, 579–590. <https://doi.org/10.1007/s11187-016-9710-4>
- Vitell, S.J., Nwachukwu, S.L., Barnes, J.H., 1993. The effects of culture on ethical decision-making: An application of Hofstede’s typology. *Journal of Business Ethics* 12, 753–760. <https://doi.org/10.1007/BF00881307>
- Walthoff-Borm, X., Vanacker, T. R., Collewaert, V., 2018. Equity crowdfunding, shareholder structures, and firm performance. *Corporate Governance: An International Review* 26(5), 314-330. <https://doi.org/10.1111/corg.12259>
- Winterich, K. P., Zhang, Y., 2014. Accepting inequality deters responsibility: How power distance decreases charitable behavior. *Journal of Consumer Research* 41(2), 274-293. <https://doi.org/10.1086/675927>
- Wooldridge, J. M. (2005). Simple solutions to the initial conditions problem in dynamic, nonlinear panel data models with unobserved heterogeneity. *Journal of applied econometrics*, 20(1), 39-54. <https://doi.org/10.1002/jae.770>
- Zengin Karabrahimoglu, Y., Guneri Cangarli, B., 2016. Do auditing and reporting standards affect firms’ ethical behaviours? The moderating role of national culture. *Journal of Business Ethics* 139, 55-75. <https://doi.org/10.1007/s10551-015-2571-y>
- Zerbib, O.D., 2019. The effect of pro-environmental preferences on bond prices: Evidence from green bonds. *Journal of Banking & Finance* 98, 39–60. <https://doi.org/10.1016/j.jbankfin.2018.10.01>
- Ziegler, T., Shneor, R. and Zhang, B.Z., 2020. The global status of the crowdfunding industry, pp. 43-61. In “Advances in crowdfunding”. Palgrave Macmillan, Cham.

Figure 1. Number of crowdfunding platforms by year in the 38 OECD countries.

The figure graphs the number of crowdfunding platforms launched (black histogram), closed (white histogram), and active (line) by year in the 38 OECD countries. Platform launch is the incorporation date of a platform, while platform termination is the year in which the platform is closed down, ceases to operate in the crowdfunding business, or the website becomes not accessible.

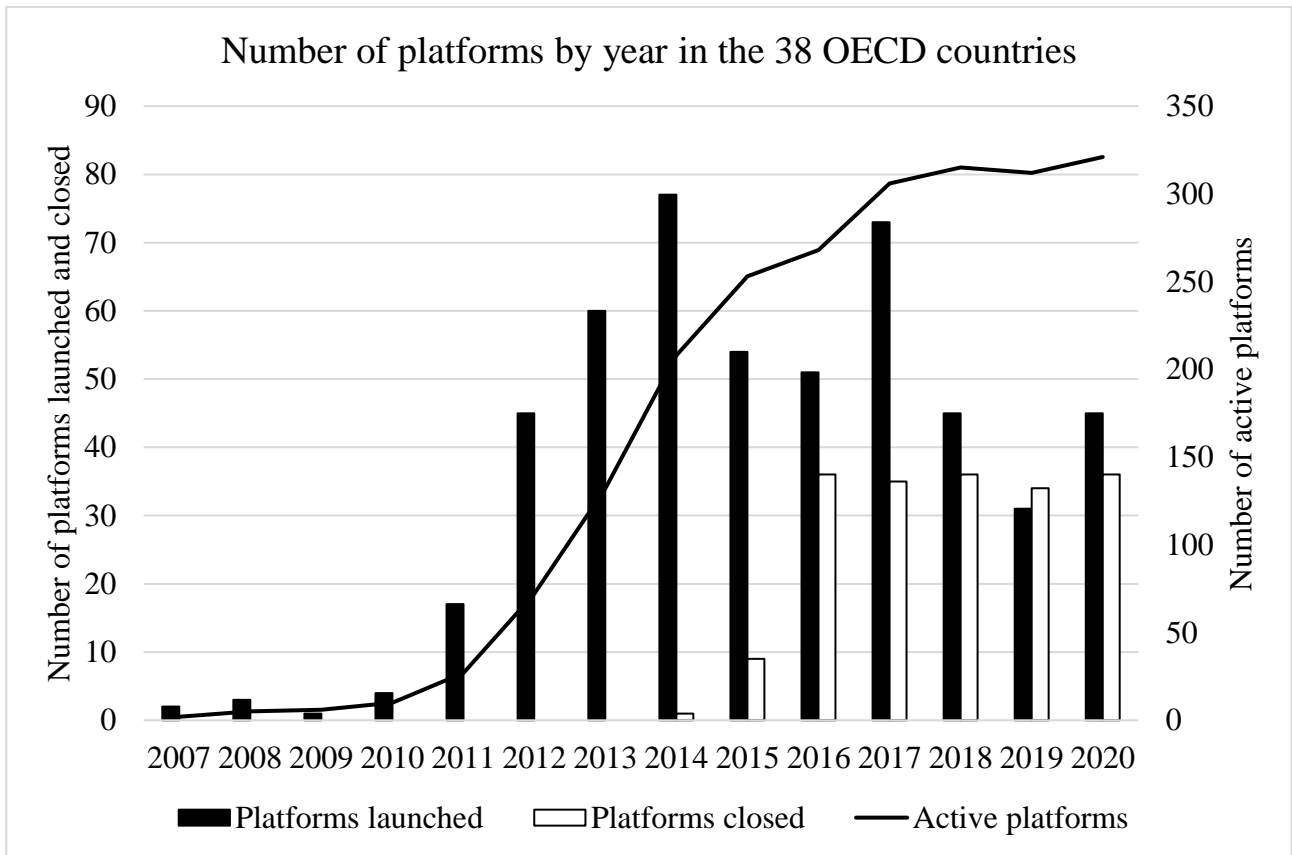


Figure 2. Survival profile of platforms.

This figure graphs the Kaplan-Meier estimator of the survival profile of crowdfunding platforms. Crowdfunding platforms are divided between platforms with ESG below the median value (N=1,033, solid line) and platforms based in countries with ESG equal to or above the median (N=1,724, dotted line), with the median value of ESG equal to 1. ESG is measured for each platform at the platform's launch. Equal precision confidence bands at 95% confidence level (Nair, 1984) are computed and displayed in the graph (dashed lines).

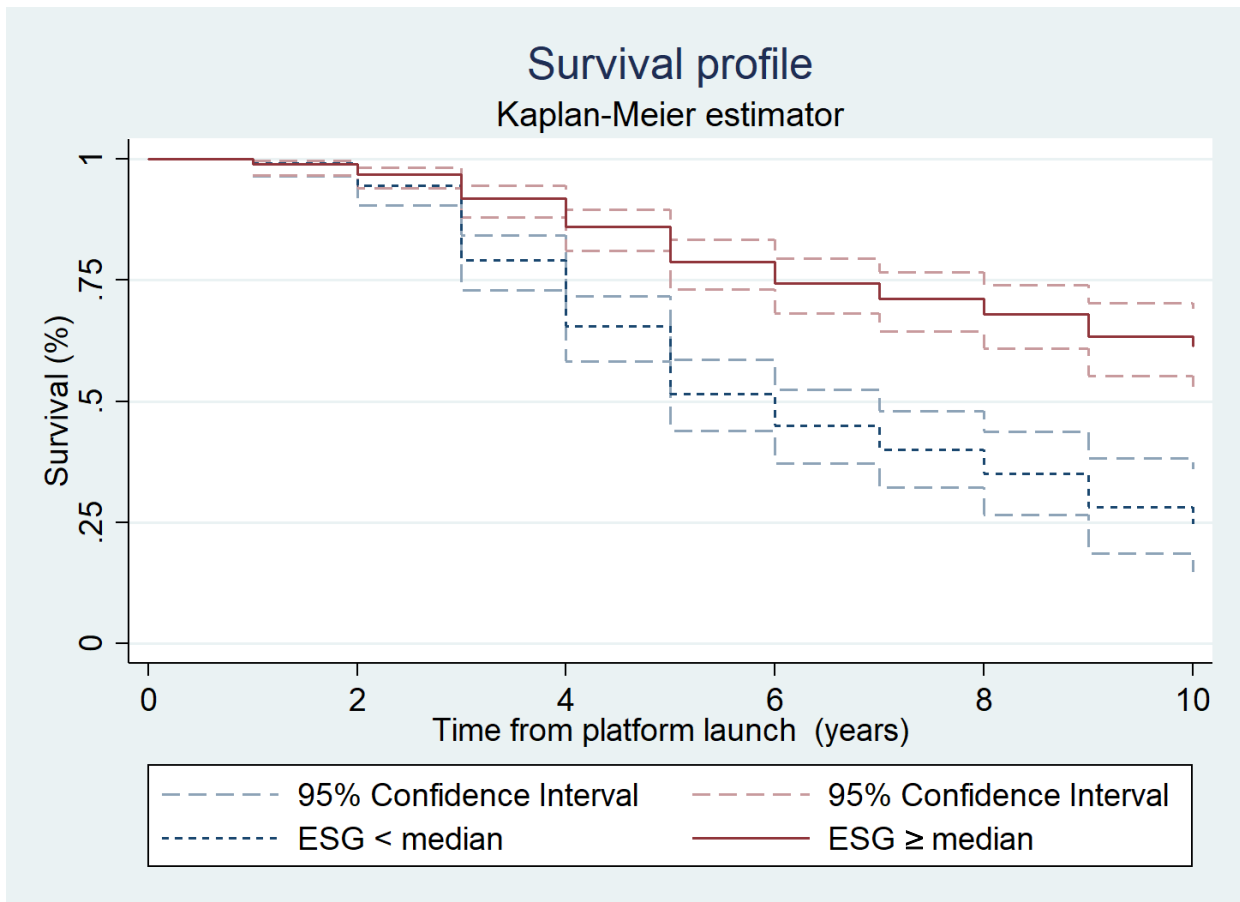


Figure 3. Average ESG Score by year.

This figure graphs the average ESG score assigned to surviving platforms by year.

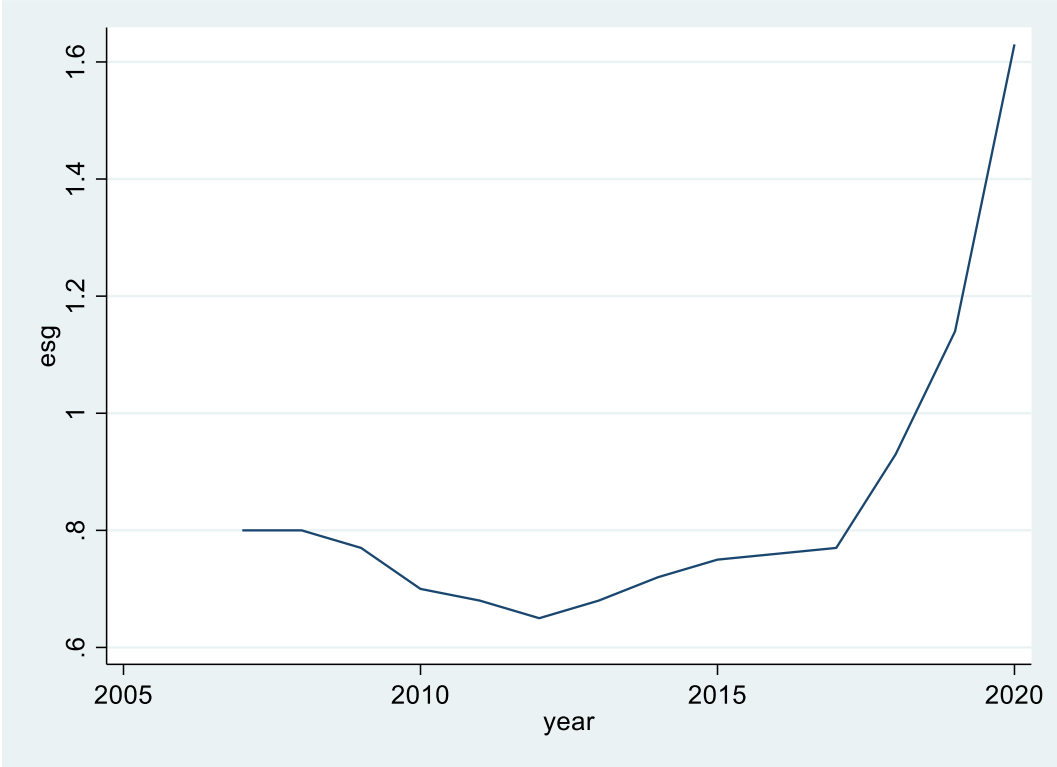


Table 1. Variable definitions

This table defines the variables employed in the survival analysis.

Variable	Definition
<i>ESG components</i>	
ESG	Sum of environmental, social, and governance factors included in the selection criteria adopted by the platform, evaluated year by year.
E. Environment	Sum of environmental factors included in the selection criteria adopted by the platform, evaluated year by year.
E1. Climate Change	Dummy variable equal to 1 for climate change issues (i.e., carbon emissions, energy efficiency, product carbon footprint, financing environmental impact, climate change vulnerability), 0 otherwise.
E2. Natural Capital	Dummy variable equal to 1 for natural capital issues (i.e., water stress, biodiversity & land use, raw material sourcing), 0 otherwise.
E3. Pollution and Waste	Dummy variable equal to 1 for pollution and waste issues (toxic emissions & waste, packaging material & waste, electronic waste), 0 otherwise.
E4. Environmental Opportunities	Dummy variable equal to 1 for environmental opportunities (i.e., opportunities in clean tech, green building, and renewable energy), 0 otherwise.
S. Society	Sum of social factors included in the selection criteria adopted by the platform.
S1. Human Capital	Dummy variable equal to 1 for human capital issues (i.e., labor management, health & safety, human capital development, supply chain labor standards), 0 otherwise.
S2. Product Liability	Dummy variable equal to 1 for product liability issues (i.e., product safety & quality, chemical safety, financial product safety, privacy & data security, responsible investment, insuring health & demographic risk), 0 otherwise.
S3. Stakeholder Opposition	Dummy variable equal to 1 for stakeholder opposition issues (i.e., controversial sourcing), 0 otherwise.
S4. Social Opportunities	Dummy variable equal to 1 for social opportunities (i.e., access to communication, finance, health care, nutrition & health), 0 otherwise.
G. Governance	Sum of governance factors included in the selection criteria adopted by the platform.
G1. Ownership & Governance	Dummy variable equal to 1 for ownership and governance issues (i.e., the delivery of voting rights), 0 otherwise.
G2. Board of Directors	Dummy variable equal to 1 for board of directors' inclusivity issues (i.e., diversity in the board of directors), 0 otherwise.
G3. Business Ethics	Dummy variable equal to 1 for business ethics issues (i.e., transparent corporate culture, clarity in explicating business values, openness in dealing with investors), 0 otherwise.
G4. Financial Stability	Dummy variable equal to 1 for financial stability issues (i.e., sophisticated techniques in assessing and managing financial risk), 0 otherwise.
<i>Cultural measure</i>	
Power distance	The extent to which the community accepts and endorses authority, power differences, and status privileges, according to the GLOBE's cultural measures (House et al., 2004).
<i>Platform-level controls</i>	

Debt	Dummy variable equal to 1 if the platform also lists debt securities at the time of launch, 0 otherwise.
Hybrid	Dummy variable equal to 1 if the platform offers different typologies of crowdfunding, like donation, reward-based, or peer-to-peer lending, in addition to security-based crowdfunding, at the time of launch, 0 if it offers security-based crowdfunding only.
Industry specialized	Dummy variable equal to 1 if only ventures active in specific industries (i.e., real estate, healthcare, green energy, food) are admitted at the time of launch, 0 otherwise.
Investors	Natural logarithm of the total number of registered investors in each platform.
<i>Regional-level controls</i>	
Competing platforms	The number of platforms active in the same region (OECD large regions, territorial level 2), measured annually.
GDP per capita	GDP per capita PPP, thousand, current international dollar, measured annually, regional (OECD large regions, territorial level 2). Natural logarithms in regression analyses. Source: OECD.Stat

Table 2. Descriptive statistics

Survival is equal to 1 for platforms that are active as of December 31, 2020. Figure 1 compares the survival profile over time of the platforms with ESG below and above the median value on platform lunch. See Table 1 for variables definition. ***, **, and * indicate significance at the 1, 5, and 10% levels, respectively, of the t-test for the difference in means between the corresponding group and the rest of the sample. Z-test of equal proportions is used for dummy variables.

	All platforms						ESG < Median	ESG ≥ Median	GLOBE's Power Distance < Median	GLOBE's Power Distance ≥ Median
	Obs	Mean	Std. Dev.	Median	Min	Max	Mean	Mean	Mean	Mean
Survival	508	0.63	0.48	0	0	1	0.50***	0.73	0.87***	0.61
ESG	508	1.41	2.10	1	0	12	0.00***	2.26	1.31	1.49
<i>ESG: Component E</i>	508	0.43	1.13	0	0	4	0.00***	0.69	0.53**	0.33
<i>ESG: Component S</i>	508	0.37	0.92	0	0	4	0.00***	0.59	0.29**	0.44
<i>ESG: Component G</i>	508	0.61	0.62	1	0	4	0.00***	0.97	0.49**	0.71
Power distance	508	2.63	0.25	2.54	2.04	4.35	2.66***	2.50	2.69***	2.47
Debt	508	0.47	0.50	0	0	1	0.59***	0.37	0.43	0.47
Hybrid	508	0.06	0.25	0	0	1	0.05	0.07	0.05	0.06
Industry specialized	508	0.28	0.45	0	0	1	0.33**	0.23	0.35	0.27
Investors (ln)	508	6.27	4.63	8.02	0	13.02	5.34***	6.79	7.93***	6.06
Competing platforms	508	12.04	12.07	7	0	43	13.42	10.95	4.76***	12.64
GDP per capita (k\$)	508	52.7	12.56	51.53	17.34	108.69	52.7	52.7	52.7	52.7

Table 3. Correlation matrix.

Correlation coefficients apply to the 508 platforms at the year of launch. Survival is equal to 1 for platforms that are active as of December 31, 2020. See Table 1 for variables definition. * indicates significance at the 1 percent level.

	Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	VIF
(1)	Survival	1.00									
(2)	ESG	-0.24*	1.00								1.03
(3)	Power distance	0.05	0.01	1.00							1.18
(4)	Debt	0.02	-0.03	-0.02	1.00						1.06
(5)	Hybrid	0.02	-0.04	-0.15*	0.07*	1.00					1.03
(6)	Industry specialized	-0.13*	-0.05	-0.14*	0.18*	0.00	1.00				1.06
(7)	Investors (ln)	0.30*	-0.07*	0.05	-0.01	0.01	-0.05	1.00			1.02
(8)	Competing platforms	0.00	0.03	-0.35*	0.14*	0.12*	0.11	-0.05	1.00		1.35
(9)	GDP per capita	-0.02	-0.04	-0.17*	0.09*	0.02	0.06*	-0.04	0.39*	1.00	1.19
	Mean VIF										1.12

Table 4. ESG and platform survival

The table reports the results of shared-frailty Weibull survival-time models with the likelihood of a platform to survive over time as the dependent variable. Model (1) is a baseline specification with our control variables. In Model (2) we include our main measure for ESG. In Model (3), ESG is a score obtained by following the methodology defined in the study by Mansouri and Momtaz (2022). In Model (4), ESG is a dummy variable equal to 1 if at least one environmental, social, or governance issue is included in the selection criteria adopted by the platform. In Model (5), ESG is a variable counting the number of ESG components included in the selection criteria adopted by the platform. In Model (6), ESG is the residual from a regression where the platform ESG score is regressed against the worldbank's policy and institutions for environmental sustainability country rating. Random effects terms (shared frailties) are included to account for unobserved heterogeneity at the platform level. A positive coefficient indicates that an increase in each variable makes the survival profile higher (and a platform termination is less likely). Conversely, a negative coefficient indicates that an increase in the explanatory variable makes the survival profile lower (and a platform termination more likely). Fixed-year effects for the establishment of the crowdfunding platform are included to control for generalized increases in ESG levels. See Table 1 for variables definition. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
ESG		0.422*** (0.119)	0.314* (0.143)	1.070*** (0.292)	1.061*** (0.301)	0.220** (0.091)
Debt	0.153 (0.254)	0.225 (0.235)	0.213 (0.249)	0.408* (0.244)	0.270 (0.236)	0.236 (0.234)
Hybrid	0.830 (0.516)	0.696 (0.470)	0.609 (0.477)	0.454 (0.455)	0.574 (0.443)	0.533 (0.443)
Industry Specialized	0.774** (0.319)	0.763*** (0.293)	0.627** (0.303)	0.656** (0.292)	0.669** (0.285)	0.646** (0.283)
Investors	0.546*** (0.072)	0.481*** (0.067)	0.507*** (0.068)	0.468*** (0.064)	0.454*** (0.063)	0.466*** (0.065)
Competing Platforms	0.012 (0.010)	0.007 (0.009)	-0.007 (0.012)	0.003 (0.011)	-0.008 (0.011)	-0.007 (0.011)
Ln (GDP per capita)	-0.373 (0.549)	-0.234 (0.505)	-0.315 (0.593)	-0.467 (0.583)	-0.236 (0.559)	-0.267 (0.556)
Constant	-3.104* (1.732)	-3.319** (1.590)	-3.828** (1.858)	-2.592 (1.823)	-3.641** (1.751)	-3.955** (1.745)
Observations	2,757	2,757	2,757	2,757	2,757	2,757
Platforms	508	508	508	508	508	508
Log likelihood	-313.3	-305.6	-299.8	-281.5	-282	-294.3

Table 5. Mediating and Interacting mechanism between ESG and investor participation

This table presents the outcome of our analysis to assess whether the overall effect of ESG on platform survival is mediated and/or interacted (moderated) by the number of investors participating at a given time to a platform. This analysis is run through two regressions (Panel A): a linear estimation of the number of investors at a given time (1), and a shared-frailty Weibull survival-time models with the likelihood of a platform to survive over time as the dependent (outcome) variable (2). This analysis allows to decompose the effect of ESG on platform survival into four components (Panel B), that correspond to the portion of the effect that is due: (i) to neither mediation nor interaction (direct effect); (ii) to just mediation (but not interaction); (iii) to just interaction (but not mediation); and (iv) to both mediation and interaction.

<i>Panel A. Estimation of the Mediating and Interacting Model</i>		
	(1): Investors	(2): Survival
ESG	0.586*** (0.062)	0.161** (0.053)
Investors		0.072*** (0.009)
ESG × Investors		0.003 (0.007)
Debt	0.030 (0.210)	0.129* (0.075)
Hybrid	0.262 (0.314)	0.178 (0.133)
Industry Specialized	0.164 (0.190)	0.179** (0.089)
Competing Platforms	-0.002 (0.008)	-0.005 (0.003)
Ln (GDP per capita)	0.504 (0.411)	0.035 (0.175)
Constant	-6.660*** (1.274)	-1.625*** (0.547)
Observations	2,757	2,757
Platforms	508	508
Log likelihood	-7996.97	-298.11
<i>Panel B. Decomposition of the ESG -> Survival effect</i>		
Total Effect		0.168*** (0.034)
(i) Direct Effect		0.056*** (0.012)
(ii) Mediating Effect		0.098*** (0.034)
(iii) Interacting Effect		0.012 (0.010)
(iv) Interacting Mediating Effect		0.000 (0.000)

Table 6. Cultural dimensions and platform survival.

The table reports the results of shared-frailty Weibull survival-time models with the likelihood of a platform to survive over time as the dependent variable. Relative to Model 2 in Table 4, in Model (1) we add interaction terms between ESG and each cultural dimension. In Model 2 we also add the other cultural variables according to the GLOBE project. Models (3-4) replicate the analysis replacing GLOBE's cultural measures with Hofstede's cultural measures. Random effects terms (shared frailties) are included to account for unobserved heterogeneity at the platform level. A positive coefficient indicates that an increase in each variable makes the survival profile higher (and a platform termination is less likely). Conversely, a negative coefficient indicates that an increase in the explanatory variable makes the survival profile lower (and a platform termination more likely). Fixed-year effects for the establishment of the crowdfunding platform are included to control for generalized increases in ESG levels. See Table 1 for variables definition. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)	(4)
ESG	0.525*** (0.141)	0.807** (0.661)	0.632*** (0.162)	0.605*** (0.149)
ESG × Power distance	-0.268*** (0.088)	-0.378*** (0.118)	-0.368*** (0.121)	0.353*** (0.115)
Power Distance	-0.043 (0.141)	-0.243 (0.241)	-0.051 (0.125)	-0.043 (0.141)
GLOBE's Uncertainty avoidance		-1.158* (0.665)		
GLOBE's Future orientation		2.200 (1.609)		
GLOBE's Institutional collectivism		0.723 (1.031)		
GLOBE's In-group collectivism		0.482 (1.022)		
GLOBE's Humane orientation		0.556 (0.865)		
GLOBE's Performance orientation		1.750* (1.031)		
GLOBE's Gender egalitarianism		0.584 (0.589)		
GLOBE's Assertiveness		-1.507** (0.661)		
Hofstede's Uncertainty avoidance				-0.278* (0.148)
Hofstede's Individualism				0.130 (0.113)
Hofstede's Masculinity				-0.306* (0.158)
Hofstede's Long-term orientation				-0.166 (0.127)
Hofstede's Indulgence				0.133 (0.132)
Debt	0.286 (0.243)	0.312 (0.256)	0.266 (0.242)	0.267 (0.241)
Hybrid	0.548 (0.457)	0.542 (0.478)	0.557 (0.455)	0.551 (0.452)
Industry Specialized	0.604** (0.292)	0.682** (0.310)	0.630** (0.290)	0.632** (0.288)
Investors (ln)	0.473*** (0.066)	0.489*** (0.069)	0.473*** (0.066)	0.465*** (0.065)
Competing Platforms	-0.009 (0.011)	-0.011 (0.012)	-0.009 (0.011)	-0.009 (0.011)
Ln (GDP per capita)	-0.290	-0.334	-0.275	-0.275

Constant	(0.580)	(0.600)	(0.575)	(0.570)
	-3.887**	-38.647**	-3.961**	-3.964**
	(1.789)	(16.227)	(1.780)	(1.766)
Observations	2,757	2,757	2,757	2,757
Platforms	508	508	508	508
Log likelihood	-290.6	-294.5	-290.1	-294.1

Table 7. Robustness tests for endogeneity concerns: control for the quality of the platform and IV regressions.

The table reports the results of shared-frailty Weibull survival-time models with the likelihood of a platform to survive over time as the dependent variable. We replicate Model (2) in Table 4 and Model (1) in Table 6 when taking into account endogeneity concerns. In Models 1 and 2, we add TrustScore as a control variable in regression models. TrustScore is from TrustPilot and measures whether reviewers are satisfied with the platform. It ranges from 1 to 5 and it is retrieved from www.trustpilot.com annually (mean value equal to 2.44). The analysis is performed on the subsample of 279 platforms available on TrustPilot. In Models 3 and 4, to address potential endogeneity problems, the ESG score is instrumented by incarceration rate (Crifo et al., 2017). Following Meoli et al. (2022), instrumented ESG scores are generated by regressing in an OLS setting the ESG score against Incarceration rate (statistically significant at less than 1 percent) and the full set of controls, and the residuals from this regression are included in the model. Random effects terms (shared frailties) are included to account for unobserved heterogeneity at the platform level. A positive coefficient indicates that an increase in each variable makes the survival profile higher (and a platform termination is less likely). Conversely, a negative coefficient indicates that an increase in the explanatory variable makes the survival profile lower (and a platform termination more likely). Fixed-year effects for the establishment of the crowdfunding platform are included to control for generalized increases in ESG levels. See Table 1 for variables definition. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

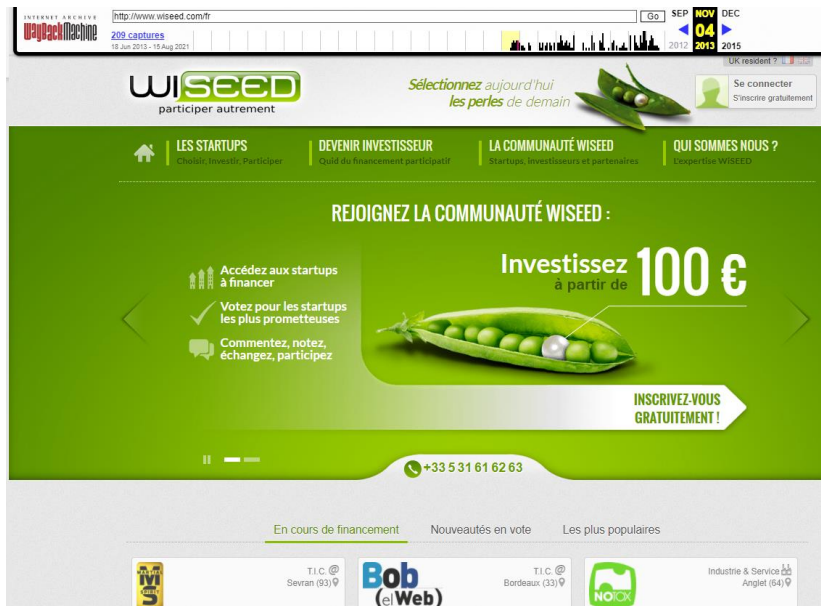
	(1)	(2)	(3)	(4)
ESG	0.173*** (0.060)	0.272*** (0.097)	4.224*** (0.837)	4.795*** (0.875)
ESG × Power distance	-	-0.151** (0.088)	-	-2.232*** (0.767)
Power distance	-0.558*** (0.179)	-0.353* (0.212)	-0.324** (0.131)	-1.644** (0.680)
Debt	-0.266 (0.259)	-0.246 (0.260)	0.359 (0.243)	0.350 (0.238)
Hybrid	0.391 (0.405)	0.445 (0.406)	0.490 (0.452)	0.491 (0.444)
Industry Specialized	0.497 (0.320)	0.493 (0.318)	0.640** (0.289)	0.668** (0.286)
Investors (ln)	0.314*** (0.060)	0.324*** (0.062)	0.454*** (0.063)	0.457*** (0.063)
Competing Platforms	0.018 (0.012)	0.018 (0.012)	-0.005 (0.011)	-0.001 (0.011)
Ln (GDP per capita)	-1.561** (0.710)	-1.611** (0.708)	-0.387 (0.578)	-0.395 (0.565)
TrustScore	0.432*** (0.111)	0.438*** (0.112)	-	-
Constant	1.098 (2.198)	1.409 (2.201)	0.046 (1.946)	0.619 (1.928)
Observations	1,656	1,656	2,757	2,757
Platforms	279	279	508	508
Log likelihood	-139.8	-138.4	-288.2	-284

Table 8. ESG decomposition and time trend

The table reports the results of shared-frailty Weibull survival-time models with the likelihood of a platform to survive over time as the dependent variable. In Models (1-4) ESG is decomposed into three components, namely environment (mean value equal to 0.43), social (mean value equal to 0.37), and governance (mean value equal to 0.66). In Models (5-8), ESG components are interacted with a Time trend. Random effects terms (shared frailties) are included to account for unobserved heterogeneity at the platform level. A positive coefficient indicates that an increase in each variable makes the survival profile higher (and a platform termination is less likely). Conversely, a negative coefficient indicates that an increase in the explanatory variable makes the survival profile lower (and a platform termination more likely). Fixed-year effects for the establishment of the crowdfunding platform are included to control for generalized increases in ESG levels. See Table 1 for variables definition. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Environment	0.531*** (0.157)	-	-	0.262 (0.171)	0.294** (0.146)			0.268 (0.151)
Social	-	0.704*** (0.216)	-	0.446* (0.230)		0.925** (0.409)		1.820* (0.982)
Governance	-	-	1.415*** (0.283)	1.252*** (0.276)			2.079** (0.954)	1.737** (0.865)
Time trend					-0.071 (0.058)	-0.093 (0.059)	-0.092 (0.069)	-0.077 (0.069)
Environmental × Time trend					0.049** (0.021)			0.055** (0.024)
Social × Time trend						-0.069 (0.044)		-0.101 (0.060)
Governance × Time trend							-0.091 (0.091)	-0.044 (0.091)
Power Distance	-0.229* (0.128)	-0.266** (0.133)	-0.376*** (0.137)	-0.360*** (0.134)	-0.245* (0.126)	-0.281** (0.130)	-0.395*** (0.135)	-0.380*** (0.134)
Debt	0.168 (0.242)	0.278 (0.252)	0.488* (0.251)	0.452* (0.246)	0.177 (0.239)	0.281 (0.246)	0.468* (0.249)	0.456* (0.248)
Hybrid	0.608 (0.459)	0.534 (0.474)	0.535 (0.469)	0.531 (0.451)	0.626 (0.454)	0.528 (0.460)	0.548 (0.460)	0.518 (0.448)
Industry Specialized	0.724** (0.294)	0.503* (0.301)	0.581** (0.293)	0.604** (0.290)	0.702** (0.293)	0.474 (0.295)	0.550* (0.291)	0.579** (0.292)
Investors (ln)	0.477*** (0.066)	0.486*** (0.068)	0.444*** (0.063)	0.417*** (0.060)	0.471*** (0.071)	0.470*** (0.073)	0.434*** (0.066)	0.407*** (0.063)
Competing Platforms	-0.010 (0.011)	-0.010 (0.012)	-0.000 (0.011)	-0.005 (0.011)	-0.011 (0.011)	-0.012 (0.011)	-0.001 (0.011)	-0.006 (0.011)
GDP per capita	-0.183 (0.578)	-0.276 (0.594)	-0.440 (0.592)	-0.293 (0.576)	-0.251 (0.571)	-0.335 (0.577)	-0.513 (0.584)	-0.386 (0.574)
Constant	-4.084** (1.806)	-3.889** (1.849)	-2.940 (1.849)	-3.373* (1.797)	-3.374* (1.891)	-2.966 (1.905)	-1.957 (1.984)	-2.501 (1.938)
Observations	2,757	2,757	2,757	2,757	2,757	2,757	2,757	2,757
Platforms	508	508	508	508	508	508	508	508
Log likelihood	-295.9	-295.6	-287.3	-281.3	-294.9	-294.3	-286.4	-279.9

Appendix A Wiseed. Screenshots of Wiseed website.



In 2013, on the WiSeed website, there is no information as regards to the inclusion of ESG criteria in the selection of businesses.

Source:

<https://web.archive.org/web/20131104040304/http://www.wiseed.com/fr>



In 2018, WiSeed started to include ESG criteria in the selection of businesses, thereby taking into account environmental and social criteria.

Source:

<https://web.archive.org/web/20180817205152/https://www.wiseed.com/fr>

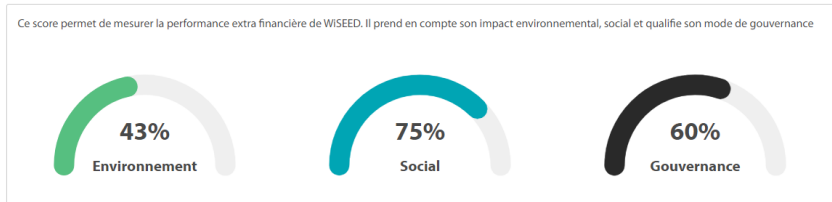
Charte d'engagements

Depuis la création de WISEED, nous avons toujours su innover. Désormais, il nous paraît essentiel d'apporter des réponses supplémentaires pour construire le monde de demain.

Aujourd'hui nous ne vous présentons pas un projet d'entreprise, WISEED est avant tout une grande communauté et nous vous invitons à nous rejoindre dans une démarche transparente et collective.

Demain, partageons les valeurs de notre charte d'engagements pour un avenir commun de WISEED en prenant l'engagement fort de se positionner comme « société à mission » au service de l'économie de la vie.

Scoring ESG



In 2021, WiSeed assigns ESG scores to selected businesses, allowing investors to measure the positive impact of firms being selected by the platform investors.

Source:

<https://www.wiseed.com/fr/nos-valeurs>

Appendix B

Coding instructions for platform-level ESG

Judge each platform on each of the three environmental, social, and governance components.

Environment:

Does the platform target companies that contribute to reduce climate change (For example: carbon emissions, energy efficiency, product carbon footprint, financing environmental impact, climate change vulnerability, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that contribute to the preservation of natural resources (For example: water stress, biodiversity and land use, raw material sourcing, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that contribute to the reduction of pollution and waste (For example, toxic emissions, packaging material, electronic waste, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that focus on environmental opportunities (For example, clean tech, green building, and renewable energies, etc.)?

Score: 1= Yes, 0=No.

Social:

Does the platform target companies that contribute to the enhancement and preservation of human capital (For example: labor management, human capital-development, health and safety, supply chain labor standards, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that engage in product liability (For example: including product safety and quality, chemical safety, financial product safety, privacy and data security, responsible investing, health, demography, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that care about stakeholder involvement (For example, controversial sourcing, customer-related controversies, support for public policies with benefit for stakeholders, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that focus on social opportunities (For example, access to communications, finance, healthcare, nutrition, etc.)?

Score: 1= Yes, 0=No.

Governance:

Does the platform target companies that have a diverse board of directors (For example, gender diversity, racial diversity, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that care about the delivery of voting rights to shareholders?

Score: 1= Yes, 0=No.

Does the platform target companies with strong business ethics (For example, transparent corporate culture, clarity in explicating business values, openness in dealing with investors, etc.)?

Score: 1= Yes, 0=No.

Does the platform target companies that employ sophisticated techniques in assessing and managing financial risks?

Score: 1= Yes, 0=No.

Appendix C

Table C1. Excerpts from platform’s official websites across the three Environment, Social, and Governance components.

Variable	Excerpts from platform’s official website
E. Environment	
E1. Climate Change	“With your funding, project sponsors can implement projects that make a significant contribution to the reduction of greenhouse gases through energy efficiency measures and the expansion of renewable energy sources.” Crowd4Climate
E2. Natural Capital	“Water is our most precious natural resource. Together we can contribute to preserve it.” Ecrowd!
E3. Pollution and Waste	“With Ecrowd! You invest in projects that work to reduce, recycle and reuse waste.” Ecrowd!
E4. Environmental Opportunities	“We are at a very exciting time in the current and global energy transition. It was only after some accidents in nuclear power plants that humanity woke up. Now renewable energy projects are being researched and developed as never before. Our vision is to support projects and companies that want to make their contribution to a clean and green planet.” Crowd Invest
S. Society	
S1. Human Capital	“We’re on a mission to support thriving local economies. Communities that invest internally, are healthier and more resilient. We want to empower local economies by connecting business with people. Vicinity is where financial capital meets social capital.” Vicinity
S2. Product Liability	“We created Sora to support entrepreneurs whose activities have a positive impact on Man and Nature; [...] SMEs advocating a more responsible capitalism and serving the common good, seeking synergy between economic efficiency and societal impact.” Sora Finance
S3. Stakeholder Opposition	“In addition to improving our environment, we also want to ensure the health of all those who live in it [...] you can make it possible to invest in a community generating a positive impact on each of its members” Ecrowd!
S4. Social Opportunities	“We want to promote the financing of companies with growth potential that have a positive impact on society and the environment, and we want to promote ethical finance and democratize impact investing” La Bolsa Social
G. Governance	

G1. Ownership & Governance	“As a general rule, shareholders have rights to vote at meetings, to receive any dividends that may be declared on the shares and to a return on capital should the company be liquidated (and should there be funds available for returning to shareholders).” Crowd88
G2. Board of Directors	“EnrichHER connects pre-qualified companies led by women and founders of color to capital, coaching, and community so they can take their businesses to new heights. If you agree, EnrichHER is the solution. We have a database of highly qualified companies led by New Majority founders and gender-diverse teams that can amplify their work, impact, and profits with your financial support and investment. The time is now to ensure that the next generation of business owners succeed.” EnrichHER
G3. Business Ethics	“Abundance was founded on the principle of democratic finance, a term we coined to describe our belief that finance works better when it is open to all. We want to help everyone mobilize their money for good, by investing directly in businesses who are trying to make a real positive impact on the world. We have led from the front since we launched in 2012 and are proud to be recognized as one of the leaders in the field of ethical finance.” Abundance “Be open and honest: Our communication will be open and honest, and we will respect everyone on our platform.” Crowd88
G4. Financial Stability	“Impact investments are made with the intention to generate positive, measurable social and environmental impact alongside a financial return.” Ignite Social Impact

Appendix D

Table D1. Robustness tests. Exclusion of platforms targeted by M&As and cross-national platforms.

Models (1-2) replicate Model (2) in Table 4 and Model (1) in Table 6, when right censoring survival values for 9 platforms targeted by M&A activities. Models (3-4) replicate Model (2) in Table 4 and Model (1) in Table 6, when excluding 12 platforms characterized by cross-national activities. Fixed-year effects for the establishment of the crowdfunding platform are included to control for generalized increases in ESG levels. See Table 1 for variables definition. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)	(4)
ESG	0.425*** (0.122)	0.393*** (0.117)	0.426*** (0.120)	0.400*** (0.115)
Power distance		-0.257** (0.126)		-0.227* (0.128)
Debt	0.161 (0.233)	0.228 (0.239)	0.231 (0.237)	0.282 (0.240)
Hybrid	0.868* (0.489)	0.716 (0.471)	0.714 (0.474)	0.502 (0.450)
Industry Specialized	0.712** (0.291)	0.570** (0.288)	0.789*** (0.296)	0.619** (0.287)
Investors (ln)	0.472*** (0.066)	0.460*** (0.064)	0.464*** (0.067)	0.450*** (0.064)
Competing Platforms	0.010 (0.009)	-0.007 (0.011)	0.008 (0.009)	-0.011 (0.011)
Ln (GDP per capita)	-0.161 (0.502)	-0.209 (0.573)	-0.267 (0.509)	-0.276 (0.566)
Constant	-3.457** (1.580)	-3.867** (1.786)	-3.263** (1.601)	-3.767** (1.771)
Observations	2,757	2,757	2,659	2,659
Platforms	508	508	496	496
Log likelihood	-300.9	-290.6	-300.6	-290.2