In the past years, sustainable finance has received substantial attention from the finance industry, the general media, and the academic community. In contrast to traditional investing, sustainable investing is based on the premise that investors—in addition to being concerned about financial performance—also express their social and environmental preferences in their investments. Initially considered as a market niche, sustainability has become a significant factor in finance. For instance, in Europe and the United States, USD 22.5 trillion of assets under management, respectively USD 17.1 trillion, are categorized as sustainable investments (EUROSIF, 2018; USSIF, 2020). However, even though there is strong demand for sustainable investing products, we still have limited knowledge about the motives as well as about the kind of information that triggers investing in sustainable assets.
In this study, we investigate the relationship between sustainability information disclosure and the reaction of investors. More precisely, we analyze the supply-side and demand-side sensitivity for retail financial products with respect to new sustainability information. To do so, we conduct a large field experiment in cooperation with an online investment platform. This platform keeps track of the portfolios of more than 3,000 social traders, allowing us to analyze potential adaptations in each individual investors’ investment strategies after the provision of new sustainability information. Due to the set up of the experiment, we have full control of observable and potentially unobservable characteristics and time trends.

Previous literature (Doskeland & Pedersen, 2016; Hartzmark & Sussman, 2019) documents strong evidence for a high demand for sustainable financial products. Reasons for the preference for sustainable investments might differ. While some investors are willing to forego a substantial part of their return to promote sustainable businesses (Riedl & Smeets, 2017; Barber, Morse, & Yasuda, 2018), others expect sustainable investments to generate competitive returns (Friede, Busch, & Bassen, 2015). So, how does this study add to the previous literature? Even though there is a well-documented demand for sustainable finance products, there remains a research gap concerning the mechanisms that generate this increase in demand. So far, we cannot rule out that the increasing demand in sustainable investing is part of a time trend and new sustainability information has little impact. Our study addresses this research gap. To the best of our knowledge, this is the first study that investigates drivers of the demand for sustainable finance with respect to sustainability information in a real-world setting by means of a controlled field experiment. Most previous studies in the context of sustainable finance are either conducted in a laboratory setting or lack a control group to account for time trends and unobserved factors (Webley, Lewis, & Mackenzie, 2001; Statman, 2004; Beal, Goyen, & Philips, 2005; Barreda-Tarrazona, Matallín-Sáez, & Balaguer-Franch, 2011).

This study’s primary objective is to shed light on the role of sustainability information. The objective breaks down into two research questions: (i) do investors show interest in sustainability information in general, and (ii) do investors react accordingly to the provided sustainability information. Importantly, we overcome potential endogeneity problems by employing a fully controlled field experiment. Defining a treatment group and a control group, allows to provide a clean micro-foundation of potential drivers in investment behavior. Crucial for our results is the purely random assignment of investors to the treatment and control groups.
The detailed procedure of the experiment is as follows: In two experiments (December 2019 and April 2020), we provided each investor of the platform with a detailed portfolio-specific performance and sustainability report. Participants received private information about their investments’ sustainability, including a time-series graph of their portfolio’s sustainability score. Participants in the treatment group received full information, while participants in the control group received only information on their performance. In our analysis, we are interested in whether investors show interest in the information provided and the extent to which they consider it when making investment decisions. Moreover, to ensure that investors know how they could apply this information to investment decisions, we combine the sustainability information with instruction on how the overall sustainability score of a portfolio can be improved: (i) we explicitly highlight the top three sustainable assets in each portfolio, and (ii) we inform about the worst three sustainable assets. Accordingly, there exist two potential channels of how investors can manipulate the sustainability of their portfolios. To improve the sustainability, participants can either increase the share of investments in the best sustainable assets or they can decrease the investment share in the worst sustainable assets.

Our preliminary findings are threefold and can be summarized as follows. First, we document a significant fraction of investors is interested in the provided sustainability information. More than 40% of the participants actively decided to retrieve the report (see Figure 1). We find that the interest in the information increases with respect to the assets under management and for investors that explicitly highlight the sustainability of their investment strategy. Moreover, a significant fraction of investors is also interested in the information on the portfolio’s historical sustainability performance (Panel B in Figure 1). In line with the common trend, the investors registered at the platform show interest in sustainability.

Second, we do not find any adaptation of the investment portfolios in response to the sustainability information. Investors do not significantly change their portfolios after retrieving the sustainability information. This finding is rather surprising. Table 1 shows the general result of the field experiment. It rejects our hypothesis of increasing demand for sustainability in finance after supplying new sustainability information. This stands in clear contrast to (Hartzmark & Sussman, 2019). In line with former literature, we confirm a positive time trend towards more sustainable investments in general. However, we do

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1Note, this effect is primarily driven by the more professional investors and is quite impressive since it measures changes in the sustainability scores of the portfolios on a daily basis.
not find a difference in the treatment and control group’s investment behavior after the provision of the sustainability information. Moreover, we also analyze potential changes only for the explicitly mentioned assets, i.e., the top and worst sustainable stocks. Again, we do not find any difference between the treatment and control group for the buying decision (see Figure 2) as well as for the selling decision.

To confirm this rather surprising finding, we conduct a battery of robustness tests. Among others, we test for different framings: (a) focus on risk, (b) focus on the ethical implications, or (c) combined. We divide our sample into various subsamples, e.g., small vs. large portfolios. We differentiate between more and less professionally managed portfolios by separating in two subsamples (below or above EUR 10,000). Furthermore, we differentiate between sustainable labeled vs. non-sustainable labeled portfolios. Plus, we verify this finding in a second experiment round with a different presentation of the sustainability information. Thus, in all our analyses, we confirm our results of investors’ limited action after the retrieval of the sustainability information.

However, we not only document an interest for sustainable finance products but also an impact on asset allocations. Social traders have a unique feature: on the one hand, they are invested in their own portfolios, on the other hand, they act as fund managers who allow others to invest in their portfolios. This unique feature allows to also investigate the reaction of flows to portfolios after revealing the private sustainability information to the public. We document a positive response to the publicly available sustainability information of a portfolio. More precisely, we find significantly higher inflows to more sustainable portfolios than to less sustainable portfolios.

Overall, we contribute to the literature on the drivers of sustainable investing and the role of sustainability information. Importantly, our preliminary findings shed light on the existence of potential boundaries in demand for sustainable finance products. On the one hand we confirm findings in the literature, documenting investors’ interest in sustainability. On the other hand, we show that stand-alone information about sustainability is not sufficient to directly translate into action: Investors do not adapt their trading behavior. Sustainability information on individual stocks is not used to systematically improve portfolio ESG scores. This finding provides valuable insights for policymakers and financial intermediaries. A clear understanding of the boundary conditions of the investment process is necessary to effectively promote sustainability in finance.

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2The average portfolio has EUR 43,800 assets under management
Figure 1: Preliminary information retrieval results

Figure 1 shows the number of participants that were interested in the sustainability information over time. We conducted two rounds of the experiment. The first round took place in December 2019; the second in April 2020. Panel A shows the interest in the general information. Namely, when participants opened the information in the report. Panel B shows when participants opened the more detailed information. Overall, more than 40% of our participants indicated interest in the sustainability information.
Figure 2: Effect of sustainability information on investment decisions

Figure 2 shows investors’ average buying share of highlighted ESG stocks (top–worst) before and after the provision of the sustainability information. The blue line indicates the treatment group, the red line the control group, and the green line the weighted average of both groups. The vertical lines represent the treatment day.
Table 1: **Preliminary main results of investors’ reaction**

Table 1 shows the main results of our study. We run an OLS regression with the daily changes of the portfolio ESG scores as our dependent variable. $D_{after}$ presents the dummy for the observations after the treatment. $D_{treated}$ indicates the dummy variable for the treatment group, and $D_{after\_treat}$ marks the dummy for the interaction term of treatment group×the time after the treatment. In total there are 48,876 observations.

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References