Extended summary

What is the impact of the company's ESG level on the relationship between the cost of capital and tax avoidance? Prior literature has been discussed the effect of tax avoidance on the cost of equity and cost of debt. However, the literature does not show evidence on how that relationship could or not change if we include the environmental, social and governance (ESG) profile of a firm.

Investors have always recognized that ESG factors are fundamental measures for risk management and company valuation. Therefore, it is understandable that nowadays a large number of managers are including those factors into their asset allocation process, using a more comprehensive approach that captures more emerging vehicles that attract investors with specific objectives.

Tax avoidance activities could be distinguished as a risky form of investment that generates incremental after-tax cash flows due to a decrease in cash tax payments. Those risks might influence the firm's external financing choices because they could overset the decrease in cash tax payments, resulting in uncertain future outcomes. Therefore, tax avoidance activities influence the firm's capital structures. Tax avoidance could be also characterized by a reduction in taxes paid to governments and thus, by an increase in after-tax cash flow for the firm. However, the expected future cash flows are uncertain since tax avoidance could impose some risk. For example, aggressive tax avoidance could lead to penalties and thus reputation costs (Shevlin et al. 2019), lower transparency and quality of financial statements (Scholes et al. 2014) and increase opportunities of managerial rent diversion (Desai and Dharmapala, 2009). It is expected that that creditors react more negatively to tax avoidance than shareholders. Creditors do not benefit from the increase cash-flow after taxes because they are fixed claimants. Prior literature finds evidence that tax avoidance activities affect the cost of debt positively. For what regards the cost of equity, the conclusions are not consensual. Recently Lee, Shevlin and Venkat (2019), in a US study, find that managers issue more debt relative to debt because avoidance activities increase more the cost of debt when compared to the cost of equity, meaning that shareholders suffer less from risky tax avoidance than creditors.

This paper aims to study whether tax avoidance affects company's cost of capital in Europe, taking into consideration company's level of ESG. While tax avoidance activities may generate a higher after-tax cash-flow as a result of lower cash tax payments

to the governments, those outcomes can be uncertain, which could impose several risks. Specifically, looking at firm's capital structure, those risks could significantly affect the firm's financing decisions by affecting both the cost of equity and the cost of debt. However, we also need to take into consideration an increasingly topic related to firm's responsibility and social impact that may also play an important role in financing decisions.

Our empirical analysis uses a dataset that comes from Thomson Reuters and comprises the listed firms in the EuroStoxx50 from 2006 to 2018. Then were used control variables to monitor possible unobserved effects, in order to get a robust estimation. We apply two measures of tax avoidance to measure the impact that tax avoidance has on the cost of capital and, to evaluate firm's responsibility and social impact, we used Thomson Reuters' ESG Combined Score. Furthermore, to test our other hypothesis, we decompose that score into ESG Environmental Score, ESG Social Score and ESG Governance Score.

We test whether ESG performance scores shape the relationship between tax avoidance and cost of capital. Our results suggest that investors perceive higher levels of ESG performance positively when investing in firms that engage in tax avoidance activities. We find that for companies with the same level of tax avoidance, shareholders react positively to higher scores of ESG performance. We also find that creditors require a lower cost of debt for firms that have the same level of tax avoidance but higher scores of ESG performance. Results suggest that although ESG performance has a significant effect on the relationship between tax avoidance and cost of capital, that effect is mostly captured by the Social and Governance components.

Our findings make contributions to the literature in the sense that the results obtained regarding tax avoidance and cost of capital are based on European firms, whereas most of the prior literature focused on US firms. Moreover, we introduced the firm's social impact, governance and environmental responsibility to that topic and showed the impact that those societal and sustainable factors have on the relationship between tax avoidance and cost of capital. Also, this study contributes to practice since it shows evidence that investors are sensitive to ESG performance scores when looking for the relationship between tax avoidance and the cost of capital.