On the limits of altruistic investor preferences: implications for ESG and responsible investments

Kristian J. Sund and Johannes K. Dreyer

Abstract

Purpose – *This paper aims to discuss the recent theory of altruistic warm-glow investor preferences, review recent findings on environmental, social and governance (ESG) and stock and operating performance and speculate on implications for managers and the green transition.*

Design/methodology/approach – *This paper bases its discussion on a general review of recent literature citing the warm-glow theory of altruistic investor preferences.*

Findings – *The warm-glow theory explains an observed phenomenon whereby investors appear willing to pay a premium for assets carrying higher ESG scores. Yet, there is new evidence that market uncertainty and perceived greenwashing reduce these preferences.*

Practical implications – *This paper offers insights and recommendations to managers regarding the importance of paying attention to investor perceptions of ESG, the fact that managers should not hesitate to aim for responsibility, and the need to avoid scandals and greenwashing, to improve investor perceptions.*

Social implications – *The warm-glow theory carries green transition dilemmas. Lower cost of capital favours green investments for high ESG firms. However, it also lowers the cost of non-green investments for those same firms. Furthermore, investors lose their appetite for responsible investments under uncertainty, and if firms are perceived to greenwash. Altruistic warm-glow investor preferences will thus not "automatically" lead to a green transition.*

Originality/value – *To the best of the authors' knowledge, this is the first essay in this journal and in general to discuss the more practical implications of the emergent theory of altruistic warm-glow investment preferences.*

Keywords *ESG, Warm glow, Altruism, Responsible investment, Sustainable investment*

Paper type *General review*

Kristian J. Sund and Johannes K. Dreyer are both based at the Department of Social Sciences and Business, Roskilde University, Roskilde, Denmark.

1. Altruistic investor preferences

With a growing attention to issues of responsibility, corporate governance and sustainability, there has also been a rise in what we might term socially responsible investing (Bodhanwala and Bodhanwala, 2020). Environmental, Social and Governance (ESG) scores have become the gold standard for reporting and evaluating the responsible performance of individual firms and their stocks. Not surprisingly, non-financial disclosures have therefore gained in importance, as firms aim to secure a high ESG score to show to investors and other stakeholders (Sheehan *et al.*, 2023). What is relatively new is that ESG scores appear also to affect investor preferences in ways that challenge our traditional understanding of the shareholder. Recent studies in financial economics examining ESG scores and stock performance show that investors increasingly value the responsible practices of firms (Hartzmark and Sussman, 2019), and a preference for the stocks of more responsible firms in turn leads to increases in the share prices of these (Dreyer *et al.*, 2023a; Pástor *et al.*, 2021).

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Put differently, investors accept to pay a higher price for the earnings of responsible firms. How do we account for this empirical observation whereby the average (representative) investor seems to care not only about financial risk and returns, but now also about responsibility? The so-called "warm-glow" theory of investor preferences seems to provide an answer, and its implications are of importance to business managers and society alike.

According to the warm-glow theory of investor preferences, investors incorporate responsible firm behaviour into their utility function alongside expected returns and risk, resulting in a higher willingness to pay for responsible assets (Gutsche and Ziegler, 2019). Investors thus accept lower risk-adjusted returns as they derive a sense of satisfaction from their responsible investments (Andreoni, 1990; Dreyer *et al.*, 2023a; Dreyer and Smith, 2024; Gutsche *et al.*, 2023; Heeb *et al.*, 2023; Pástor *et al.*, 2021; Renneboog *et al.*, 2008). This seemingly altruistic behaviour has been developing over time in the USA and other stock markets (Dreyer *et al.*, 2023a; Tatomir *et al.*, 2023). The effect has furthermore been captured using framed field experiments for sustainable investments in other categories of assets such as bonds and equity funds (Heeb *et al.*, 2023; Gutsche *et al.*, 2023). Specifically, investors reveal a significant warm-glow effect in their investments in the period that starts after the financial crisis of 2007.

Behind the generalised warm-glow preference of the average, representative investor, modelled in the literature, there are many investors, each with their own levels of altruism. Some investors have higher levels of altruism, which is associated with a preference towards socially responsible investing even at a financial cost, because they value social outcomes beyond personal gain (Brodback *et al.*, 2019; Nakai *et al.*, 2018; Riedl and Smeets, 2017). Others may be more traditional, in the sense that they care mainly about financial returns.

Despite its inherent problems (for a discussion of these, see e.g. Kacanski *et al.*, 2023), ESG scores are today widely used to measure different dimensions of responsibility, and for stakeholders has become an indicator of social good, to which the representative investor may have an altruistic preference. As previously stated, this creates higher demand for these assets and drives up their prices (Dreyer *et al.*, 2023a; Dreyer and Smith, 2024; Pástor *et al.*, 2021). Consequently, investors accept lower financial returns and can be said to be willing to pay a price for responsibility (Renneboog *et al.*, 2008). Put differently, investors are willing to pay more to own an asset generating a certain level of return (or profit), as long as the associated ESG score is also higher. By direct implication, if investors require sustainable firms to pay less in returns, then the cost of equity and debt of these firms decrease accordingly. Firms can finance their asset investments through debt and equity, for example by issuing bonds (borrowing), or issuing stocks (selling equity). The implication discussed above is that the sustainable firm can borrow at a lower interest rate, or issue stocks at a higher price (for a discussion of empirical evidence supporting this relationship, see e.g. Fatemi *et al.*, 2018).

2. Some of the challenges of environmental, social and governance

In practice, investors, including institutional investors such as pension funds, may use both the aggregated and disaggregated pillar scores provided by ESG rating agencies to identify those firms that are responsible or sustainable (Van Duuren *et al.*, 2016; Dreyer *et al.*, 2023b). This leads to some challenges for firms wishing to invest in responsibility to achieve higher ESG scores. Firms in practice must prioritise between individual issues and projects, that link to specific metrics those underly individual pillars ("E", "S", or "G"). A lack of standardisation in metrics to identify such projects makes the *de facto* investor decision of aiming for responsible or sustainable investments complex (Kacanski *et al.*, 2023). For example, different agencies rate differently, and ESG metrics are adapted over time, making direct longitudinal comparisons of ESG performance difficult (for a sample discussion, see e.g. de Villiers *et al.*, 2022).

New metrics have regularly been introduced, and many have historically been measured as simple binary variables. As Tatomir (2023, p. 154) for example noted, *the number of datapoints considered in the ASSET4 framework has increased from a little over 250 in 2013 to over 450 in 2020*. An example of a datapoint, or metric, from the 2017 MSCI framework was the following: "Reliance on Carbon-Intensive Supply Chain", which was measured with a simple binary yes/no. Something as complicated as the carbon intensity of the supply chain of a large multinational firm was thus reduced to a simple "yes" or "no" measure. For the business leader, this makes it difficult to assess how investments in reducing carbon intensity will actually influence the firm's ESG score. When will a yes turn into a no, or vice versa?

For investors too, this could be a problem. On the one hand, investors may evaluate firms either using the aggregated ESG score, or a disaggregated score split into E, S and G. Furthermore, different investors have been shown to have different sustainability-related preferences when they evaluate the responsibility of a given firm (Assaf *et al.*, 2024). On the other hand, if investors were to doubt the ESG methodology itself, we could expect their altruistic warm-glow preference to disappear. This would decrease prices of sustainable assets and increase investors' expectations of returns and the firm's cost of capital. This explains why it becomes urgent for both firms and investment institutions to understand and enhance the methodologies behind ESG ratings (de Villiers *et al.*, 2022).

3. Overview of the limits of altruistic warm-glow investing

Recent research has highlighted several serious limiting factors for altruistic warm-glow investing. Firstly, self-reporting standards are a potential problem, as they open space for greenwashing (Tatomir *et al.*, 2023). Greenwashing refers to a deliberate attempt by a firm to appear more responsible and sustainable than it is. If a firm deliberately misreports its ESG metrics, trying to look more responsible than it is, this undermines the trust of investors in these metrics. Recent evidence suggests that greenwashing behaviour is significantly higher among manufacturing than service firms (Baldi and Pandimiglio, 2022). Based on this observation, Tatomir *et al.* (2023) argued that manufacturing industries are more at risk of being perceived as potentially greenwashing, which could explain why the warm-glow effect appears more pronounced for services than manufacturing shares. A lack of standardisation in ESG ratings further exacerbates this problem. Investors in general run the risk of investing in greenwashed assets (Yu *et al.*, 2020), because the rating of a given firm will vary significantly according to the ESG rating agency used (Avramov *et al.*, 2022).

A second limiting factor is geographical in nature. As pointed out recently by Bodhanwala and Bodhanwala (2020) in this journal, financial markets in developing nations lagging both in terms of ESG reporting, and of offering responsible investment instruments such as high ESG equity funds. This limits any positive impacts of warm-glow investing to developed markets. Investors will treat investments in developing nations as traditional investments and will have a lower willingness to pay for these.

A third limiting factor concerns uncertainty, which has long been recognised as having a deep impact on managerial and investor decision-making (Sund *et al.*, 2016, 2022). Nofsinger and Varma (2014) claimed that socially responsible portfolios overperform conventional ones in situations of market distress, whereas the opposite occurs in normal economic periods. They believe that responsible portfolios mitigate risks (Ferriani and Natoli, 2021; Broadstock *et al.*, 2021; Shanaev and Ghimire, 2022). Climent and Soriano (2011) on the contrary found that socially responsible investment funds underperformed relative to others between 1987 and 2009, whereas funds overall performed in line with each other between 2001 and 2009 (a shorter period that includes the financial crisis). Similarly, Ibikunle and Steffen (2017) showed weaker returns of green European funds between 1991 and 2011, but not between 2011 and 2014, during the Euro crisis. Thus, although investors have a warm glow, this glow appears unstable. We would speculate that

high market uncertainty reduces the representative investor's warm-glow preference, something that has been proposed and empirically explored by Dreyer *et al.* (2024).

If indeed this proposition is correct, the current period of high uncertainty, with the aftermath of the COVID-19 crisis and related supply chain uncertainties, conflicts in Ukraine and the Middle East, tensions between China and the USA, and so forth, might affect the cost of equity and capital of firms investing in ESG (Dreyer *et al.*, 2024). We return to this point in a later section.

4. Implications for managers of these limits

If investors experience a warm glow regarding a particular firm due to the firm's high ESG score, this should reduce their expected returns from that firm (Renneboog *et al.*, 2008; Pástor *et al.*, 2021; Dreyer *et al.*, 2023a). The logic is simple. If investors prefer high ESG investments, this should increase the demand for these assets (Gutsche and Ziegler, 2019). Following this effect, the prices of shares and bonds of high ESG firms should increase, thereby reducing expected returns. From the firm's perspective, lower payments for investors imply a cheaper cost of capital (WACC). As investors (willingly) accept lower risk-adjusted returns, the firm's cost of capital decreases. The opposite is valid for assets of perceived irresponsible firms, i.e. those with low ESG scores. Firms should thus be naturally incentivised to disclose socially and environmentally responsible practices (Heinkel *et al.*, 2001), especially when the firm needs to finance capital investments. Higher levels of reported responsible performance, particularly within environmental and governance practices (Ng and Rezaee, 2015; Chava, 2014), have indeed been shown to lead to a lower cost of capital (El Ghoul *et al.*, 2011). An important implication of the warm-glow theory is therefore that perceived responsibility provides a competitive advantage for firms, through the lower cost of capital. This cost advantage allows the high ESG firm not only to maintain an over-all lower cost position, but also to invest in growth and differentiation factors more cheaply than competitors with a lower ESG score.

Insight 1: The warm-glow effect is associated with lower cost of capital for firms perceived as responsible.

Given all this, there could be a temptation for firms to misreport, to illegitimately gain a higher ESG score. The consequences of disclosure of irresponsibility and downright greenwashing have been highlighted in recent literature (Liu *et al.*, 2022; Pizzetti *et al.*, 2021; Szabo and Webster, 2021; Wang and Li, 2019). Extending the logic of the warm-glow theory, should investors become aware of greenwashing in the case of a particular firm, one would expect them to lose the warm-glow preference for this firm. This was demonstrated by Tatomir *et al.* (2023). Thus, as the investor is no longer able to get a warm glow, because of their perception of greenwashing, they revert to the risk-return expectations of the traditional investor, who cares only about the firm's financial performance (Renneboog *et al.*, 2008). In other words, perceived greenwashing might play a role in reducing the competitive advantage of the firm that results from warm glow. The logic extends to groups of firms or even entire industries (Tatomir *et al.*, 2023). Negative effects of greenwashing behaviour could spill over to competitors in the industry, if investors become uncertain of the validity of ESG scores in that industry (Avramov *et al.*, 2022). Consequently, the cost of capital for the entire industry might increase. In other words, we would posit that there is a risk that *de facto* responsible firms end up paying for the greenwashing behaviour of competitors, which can be seen as a negative externality of greenwashing practices (Tatomir *et al.*, 2023).

Insight 2: Perceived greenwashing might have a spill-over effect over a whole industry, so that the irresponsible behaviour of one firm could affect the cost of capital of another.

Market uncertainty is another issue that can have implications for the effect of warm glow on cost of capital and consequently destroy the positive effects of perceived responsibility on competitive advantage. In periods of high uncertainty, investors become relatively more concerned about protecting their wealth. This reduces the warm-glow effect. In other words,

investors might "do good in good times only" (Dreyer *et al.*, 2024; Nofsinger and Varma, 2014). Here uncertainty plays the role of contingency factor of warm-glow investment. In periods of high uncertainty, prices of assets perceived to be responsible tend to fall, which increases expected returns and consequently the cost of capital. Thus, during periods of high uncertainty, investing in responsibility might not lead to a lower cost of capital. This hypothesis is compatible with recent observations. Indeed, as pointed out by Dreyer *et al.* (2024), according to UNCTAD (2022), there is right now a negative trend in responsible investments that *reflects a shift in investor sentiment due to the food, fuel and finance crises around the world, the Ukraine war, rising inflation and interest rates and fears of a coming recession*. The implication is that the economic and geopolitical outlook is a key variable in the decision making of managers. If managers expect a crisis, it might not be a good time to go responsible, as investors will tend to disregard ESG scores during such a crisis period.

Insight 3: Altruism levels and the warm-glow effect might go down or even disappear in periods of high market uncertainty.

However, literature examining the relationship between ESG scores and operating performance might suggest a different conclusion, i.e. that perceived uncertainty could be irrelevant to the decision of going responsible. Although the investor might not value responsibility as much during crisis periods, what is the cost for the firm of "doing good"? According to Tatomir *et al.* (2022), while high ESG scores lower the cost of capital, it does not lower operating performance. In other words, even though responsibility will not necessarily translate into lower cost of capital in periods of high uncertainty, due to lower levels of warm glow, there is no loss in operating performance of going responsible. This view seems to be backed up by empirical evidence from numerous studies that defend a neutral (e.g. McWilliams and Siegel, 2000) or positive relationship between ESG scores and operating performance (e.g. Al-Tuwaijri *et al.*, 2004; Friede *et al.*, 2015; Margolis and Walsh, 2003; Orlitzky *et al.*, 2003; Roman *et al.*, 1999; Simpson and Kohers, 2002). This evidence suggests that firms could invest in responsible practices independently of uncertainty, because there is no operational performance downside to doing so. This argument alone should be seen as an incentive for firms to maximise responsibility regardless of uncertainty considerations. However, a few authors observe a negative relationship between responsibility investment and operating performance, which would go against this argument (e.g. Wright and Ferris, 1997). Clearly more research needs to be conducted in this area, but our reading of existing studies is that we are moving towards a consensus.

5. Three resulting recommendations for business leaders and policymakers

What should business leaders make of the various implications of the emerging literature on the warm-glow theory? We offer a series of recommendations. Firstly, we would stress the importance of paying attention to investor perceptions of ESG. It is perceptions of ESG, greenwashing and market uncertainty that drive warm-glow investing, not whether firms are really acting responsibly or sustainably. This means that business leaders must pay special attention to the reputation of their firm. Once a firm gains a reputation for misreporting and greenwashing, this reputation may be difficult to shed and could result in a higher cost of capital, leading in the end to a loss of competitive advantage and consequently a lower operational performance.

Sustainability certifications and labels have been shown to increase the willingness to invest in socially responsible investments (Bilbao-Terol *et al.*, 2017; Gutsche and Zwergel, 2020). Studies of investor nudging suggest that investors in general are susceptible to being influenced in the direction of responsible investments when this influence is consistent with their own social values (Gajewski *et al.*, 2022; Meunier and Richit, 2024). The use of certifications and labels could help nudge investors towards investments perceived as more responsible, reducing the cost of capital of these firms and promoting sustainability. Thus, for policymakers, industry associations and responsible firms, promoting and opting into certifications and labels could have positive societal, industry and firm-level effects.

Secondly, we suggest that the cost of capital can be reduced through ESG scores, without necessarily reducing operating performance. This means that managers should not hesitate to aim for responsibility. Part of the explanation for this is the reduction in the cost of capital that accompanies the attraction of warm-glow investors. The reduction in cost of capital could help offset any costs associated with aiming for a higher ESG score. Given that some investors have higher levels of altruism than others, associated with a greater preference towards socially responsible investing (Brodback *et al.*, 2019; Nakai *et al.*, 2018; Riedl and Smeets, 2017), an interesting option could be for high ESG firms to target investor relation campaigns at more altruistic individuals, as a solution to raise more funds.

Furthermore, intuitively, many of the typical investments involved in improving ESG scores, such as investments in better governance systems, reducing corruption, more transparent remuneration systems, better health and safety, better HR policies, closer collaboration with societal stakeholders and so forth, could result not just in costs, but also in direct productivity gains (e.g. Buhai *et al.*, 2017; Chiang and Lin, 2007; Sánchez and Benito-Hernández, 2015). Becoming more attractive as an employer, and other such benefits, ultimately led to such initiatives paying for themselves. While this scenario may not always play out, the empirical evidence on the relationship between ESG scores and firm operating performance suggests that on average, there is no performance loss (i.e. no loss in terms of profits) associated with investing in higher ESG scores.

Thirdly, we recommend that firms in industries with clearly defined industry borders deploy common non-market strategies to improve investor perceptions for the industry. We also recommend that both policymakers and other stakeholders including industry associations pay special attention to the problem of greenwashing. Rather than just sanctioning those firms that greenwash, a proactive approach can be used to engage and strategically nudge greenwashers towards more sustainable practices (Glavas *et al.*, 2023; Lyon and Montgomery, 2015; Xue *et al.*, 2024). There is indeed evidence that perceived corporate scandals and greenwashing can spill over from a single firm to an entire industry or supply chain (Pizzetti *et al.*, 2021). For example, it was recently demonstrated that perceived greenwashing of one brand negatively affects consumers' purchase intention of green products from other brands in the same industry (Wang *et al.*, 2020). Another example is when the recent Volkswagen emission scandal resulted in a negative net spill-over effect to European competitors and suppliers, both on stock and bond markets (Barth *et al.*, 2022). From a warm-glow theory perspective, if one firm gets involved in a scandal, or gets accused of greenwashing, this can spill over so that the warm glow diminishes and the cost of capital increases for all firms in the industry (Tatomir *et al.*, 2023). Dealing with this risk of spill-overs could be handled by employing a non-market approach involving competitors, suppliers and wider stakeholders in the industry. Examples of such approaches include working through industry associations to establish industry-wide quality labels, codes of conduct, or controls, essentially self-regulating the industry to avoid scandals and greenwashing that could spill over (Erwin, 2011; Hemphill, 1992). We do not see this as a replacement of regulation by policymakers, but as a necessary complement to such regulation.

6. Concluding thoughts

A growing number of empirical studies find results that can be explained by the emerging warm-glow theory, suggesting underperformance of responsible stocks (e.g. Brammer *et al.*, 2006; Climent and Soriano, 2011; Fatemi *et al.*, 2018; Ghoul *et al.*, 2018; Gutsche *et al.*, 2023; Heeb *et al.*, 2023; Hubel and Scholz, 2020; Ibikunle and Steffen, 2017; Renneboog *et al.*, 2008; White, 1995). A concluding word of caution is nevertheless in order. The arguments we bring forth in this essay hold true if, and only if, the warm-glow theory is valid. This theory is still young, and although current empirical evidence seems consistent with it, time will tell whether it holds true.

Empirical observations on the correlation of ESG and stock performance are mounting, but a few studies find counterintuitive results. For example, some studies advocate that responsible

stocks either overperform or perform at the same level as their peers (e.g. Alda, 2020; Bauer *et al.*, 2007; Bauer *et al.*, 2005; Bodhanwala and Bodhanwala, 2020; Cai and He, 2014; Consolandi *et al.*, 2020; Derwall *et al.*, 2005; Dreyer *et al.*, 2023b; Gregory and Whittaker, 2007; Hamilton *et al.*, 1993; Khan, 2019; Naffa and Fain, 2022). Dreyer *et al.* (2024) suggested that these mixed results in the literature can be reconciled if one accounts for uncertainty and perceptions of greenwashing as contingency variables of warm-glow investing. They find evidence of underperformance in periods with normal levels of uncertainty and in sectors that are recognised for not greenwashing. Further contingency factors will no doubt be introduced in future studies, as this line of research moves towards a consensus. A particular limitation in this entire strand of literature is that evidence of warm-glow theory is limited to listed firms, and to developed nations (Bodhanwala and Bodhanwala, 2020). Whether the conclusions, and thus our implications and recommendations, extend to unlisted firms, for example by reducing the cost of capital of bank loans or bonds, remains to be confirmed.

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Corresponding author

Kristian J. Sund can be contacted at: sund@ruc.dk