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ARE WE THERE YET? THE EVALUATION OF ESG IMPACT ON CORPORATE FINANCIAL PERFORMANCE IN CEE

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Abstract. The goal of this article is to provide an evaluation of ESG's (environmental, social, governance) impact on the financial performance in the context of the corporations that are stock listed in the emerging economies of Central and Eastern Europe (CEE). A number of studies have proven ESG's importance for the global equity markets, however, given the practically slower roll-out of sustainability measures in the emerging markets, the impact on the adoption in the CEE might be lagging. Based on the quartile analysis performed on a sample of RobecoSAM ESG scores and Bloomberg ESG disclosure, the results do not indicate a direct correlation between higher sustainability scores and improved financial performance. The results of the study demonstrate that companies with good ESG performance in the CEE currently do not benefit from higher stock returns. In addition, also no clear trends between the link of the ESG and corporate financial performance can be detected.

Keywords: ESG, ESG disclosure, CEE, stock returns.

JEL Classification: G30, G32, Q56, M14.

Introduction

The sustainability topic in the financial markets and among corporations has been on a rapid rise for over a decade now. Most recently, a new all-time high of $649 billion flowed into ESG-targeted funds globally in 11 months of 2021, up from the $542 billion and $285 billion in the comparable figures for 2020 and 2019, respectively. According to data, ESG funds as of the end of 2021 accounted for already 10% of the worldwide fund investments (Reuters, 2021).

The rising demand for the ESG compliant investments is believed to reward the companies with a positive impact on the financial performance. A meta-study by Friede et al. (2015) summarized that around 90% of more than 2000 academic papers in their sample reveal a non-negative impact on the financial performance for companies with better sustainability practices, whereof 63% showed a positive correlation (Friede et al., 2015). Subsequently, more companies have chosen in favour of putting more focus on ESG disclosure and sustainability related activities. Over the almost decade, there has been a surge in the ESG popularity and the volume of sustainable investments – thus considerably speeding up the ESG practice adoption across a wider circle of corporations. The significantly broader implementation could arguably minimize the competitive advantage that sustainability could potentially offer, however, the recent studies show that it is still not the case. Companies with higher ESG standards tend to enjoy financial rewards. The results of an utmost recent study, examining the relationship between ESG and financial performance in more than 1,000 research papers written in the time span between 2015 and 2020, found that a mere 8% of them demonstrated a negative relationship. Furthermore, the authors confirmed that twelve of thirteen meta-analyses (comprising in total 1,272 studies) found a positive association between some aspects of sustainability and financial performance over the time span from 1976 to 2018 (Whelan et al., 2021). This proves that the impact of the ESG is not diminishing over time so far.

The significant power attributed to the ESG disclosures and endeavors to affect companies' value and financial performance could potentially become an accelerator leading to improved development of the corporations and the investment climate in the countries with higher ESG adoption rates. Therefore, it would be even more important for the companies operating in the emerging

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economies to foster wider ESG measure adoption. With respect to Europe – while European Union is generally in a leading position globally in terms of existing regulations and efforts in corporate sustainability encouragements, the Central and Eastern European (CEE) countries, even though being EU members, in terms of ESG is still developing markets when compared to for example Scandinavian countries or Western Europe economies.

Given the rather low level of stock market capitalization, as well as the overall higher political and business environment uncertainty, corporate sustainability in emerging markets such as the CEE countries can be considered even more critical, thus this study chooses the specific region for the analysis. Previous studies on CEE corporations indicate that the ESG topic is of growing importance also in this area (Horváth et al., 2017), (Kocmanova et al., 2011), (Zumente et al., 2020). In addition, a recent CEE investor study by Deloitte has indicated that 57% of the surveyed private equity companies always perform ESG evaluation as part of due diligence (Deloitte, 2020), signaling the rising role of ESG also in the investment processes.

There are, however, certain challenges that hinder performing business-wide and academic research for the region stemming from the lack of proper ESG data availability. According to OECD, the market coverage of the ESG ratings is still relatively low—while in the US approximately 25% of all the public companies have an external ESG score, only 10% of the European companies have a score available, especially negatively differentiating against the smaller market capitalization companies (OECD, 2020). Consequently, the market penetration of the ESG scoring in CEE is still extremely low (Zumente & Lāce, 2021).

Nevertheless, understanding whether the ESG disclosures and higher sustainability performance could result in better financial performance would be of interest not only for the investors but also for the companies themselves. Thus, this research aims to evaluate the sustainability impact (in terms of both – disclosure level and performance) on the financial and stock market performance in the context of the corporations that are stock listed in the emerging economies of CEE. Given the data limitations, quartile analysis based on RobecoSAM ESG rating score, and Bloomberg ESG disclosure score is performed. The study limits itself to the stock-listed corporations of 10 CEE countries (Estonia, Latvia, Lithuania, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Romania and Bulgaria) that have the respective sustainability scores available in the Bloomberg data base as of January 22, 2022 (65 companies for the disclosure score analysis and 56 companies for the ESG performance analysis). The financial figures employed for the analysis include retrospective three and five year returns as well as latest available financial data as of this date. The remainder of the paper is organized as follows. Section 1 summarizes the academic literature and data on the differences between ESG disclosures and sustainability performance and their implications on the firm value metrics. It also highlights the key elements, why the topic should be critical in emerging economies like CEE. Section 2 summarizes the data set used for the study and the methods applied. Section 3 describes and discusses the key outcomes and results, while finally the last Section concludes the paper.

This study contributes to the academic literature by providing an analysis of the ESG disclosure and score relation to the corporate financial and stock performance. It also provides input for the investors, which are using external rankings to decide on their investments following sustainable investing strategies. Finally, it contributes some new evidence to the CEE region-specific academic literature, which helps to better understand the context for investments in the region.

1. Literature review

1.1. ESG performance vs ESG disclosure

As there is no one globally accepted sustainability reporting standard, the extent of the ESG disclosure varies greatly across the (1) geographies due to differing regulations, (2) industries due to changing materiality as well as (3) chosen reporting standards that can be used for the disclosures (Ioannou & Serafeim, 2017).

The connection between the ESG disclosure volume and the actual performance seemingly goes hand in hand. While the aggregate analysis of the ESG implementation degree is based on actual disclosures, a higher degree of disclosure is necessary to limit the information asymmetry. This view would support the Voluntary Disclosure theory developed among others by Dye (1985) and Verrecchia (1983) suggesting that companies having better performance should also voluntarily like to disclose more. Alternatively, one could argue that extensive disclosure only fosters greenwashing concerns rather than providing valuable content. So, for example, Cho et al. (2015) have suggested that "contradictory societal and institutional pressures, in essence, require organizations to engage in hypocrisy and develop façades, thereby severely limiting the prospects that sustainability reports will ever evolve into substantive disclosures".

The academic research has documented mixed findings concerning the relationship between ESG disclosure and sustainability performance. For example, Dhaliwal et al. (2011) report a positive impact from corporate social responsibility disclosure on the sustainability performance and the subsequent cost of capital. Fatemi et al. (2018) has found that increased disclosure might have varying effects on the ESG strengths and concern areas. Their results indicate that companies having specific ESG concerns benefit from additional sustainability disclosures, while firms with ESG strengths experience lower valuation effects of additional disclosures. Finally, while Clarkson et al. (2008) find a positive association between environmental performance and the level of discretionary environmental disclosures, they also point towards the differences between the discretionary disclosure and the disclosure done following regulatory standards, which is likely to be one of the sources of the variances between the documented differences in the results.

The literature so far has used various approaches on tackling the disclosure vs. performance issue when measuring the impact on the financial performance – (1) using only reported ESG disclosure level implying that only the quantity of the non-financial information is measured or analysed, (2) more recently with the rise of commercial ESG rating and score provision, increasingly more studies use external ESG ratings in order to evaluate the quality of the actual sustainability performance, and (3) individual self-developed methods or qualitative / quantitative analysis of the disclosed information in order to assign a relative ESG performance score. Each approach arguably has its strengths and limitations; however, the non-standardized approach is likely one of the sources of the lacking consensus on the topic. Global evidence, summarized by Dhaliwal et al. (2014) analyzing ESG disclosures in an international setting covering 31 countries divided based on higher and lower stakeholder orientation, showed that the disclosures had a positive impact on lowering the cost of capital with the effect being more pronounced in stakeholder-focused countries. Previous meta-studies i.e., by Friede et al. (2015) summarized that around 90% of the academic papers in their sample of 2000 studies reveal a non-negative financial performance effect for companies with better sustainability practices (by not differentiating between ESG performance and disclosure). The most recent overarching evidence is provided by the meta-analysis performed by Whelan et al. (2021), who have documented that only 26% of the sample studies focusing on only ESG disclosures discovered a positive correlation with financial performance, in contrast to 53% of the studies that tackled ESG performance measures in the value generation analysis signalling the stronger effect of the "content over form".

1.2. ESG relevance for the CEE markets

Given the rise of the corporate sustainability requirements and wider adaption of the ESG standards, the logical question of its relevancy arises. Is ESG becoming a mere hygienic factor that is expected to be implemented by every market player across the globe or can it still be seen as a potential source of a differentiation and competitive advantage? Ioannou and Serafeim (2019) in their research differentiate between the application of the *strategic* sustainability practices, which they find as positively associated with financial performance measures, while the adoption of *common sustainability practices* was found to relate only with expectations of future performance.

From this aspect, proper strategic ESG implementation as a source of competitive advantage might be seen as even more important in the emerging economies, where investors are faced with higher uncertainty and companies must fight harder to attract investments. Earlier studies show that investors associate firms investing in sustainability measures with higher transparency and less opportunism, lowering the perceived agency costs and information asymmetry (Dhaliwal et al., 2011). Decreased information asymmetry in turns facilitates easier capital attraction for the corporations, thus allowing to grow faster and with less effort (Cheng et al., 2006).

The relationship is proven by Ghoul et al. (2017). By evaluating the relationship between ESG performance and company value based on a sample of 53 countries, the authors find ESG performance to be positively related to firm value, especially in countries with weaker market institutions. Higher ESG performance is associated with better access to financing, especially in countries where equity and credit markets are weaker, as well as increased future sales growth in countries having less robust legal institutions.

In the case of the CEE countries the average performance of the legal system (Figure 1) as well as the degree of the stock market activity (Figure 2) are generally below their Western European and Scandinavian peers. With respect to the strengths of the legal system, the Fraser's Institute Index shows the quality of the legal system and property rights, with better index scores in a scale from 1 to 10 attributed to better quality. While the Baltic countries in this measurement do not lag significantly, the results of the remaining CEE geographies score worse (Fraser Institute, 2019).

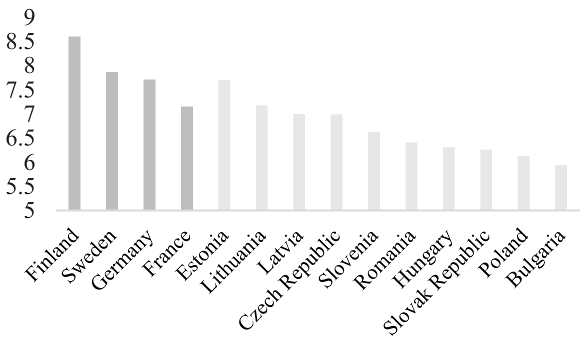

Figure 1. Legal system and property rights assessment on a scale from 1 to 10 (source: created by authors based on Fraser's Institute Index data for 2019)

The case is similar for the CEE stock markets, as the rate of stock market capitalization as a proportion of GDP in the CEE countries is significantly lower than the EU average (see Figure 2). Several of the CEE stock exchanges are among the smallest stock exchanges in the world and measure small also in absolute figures.

The implications of the low stock market capitalization stretch also to the sustainability area. Recently, the most widely spread approach in performing the ESG evaluation leans towards the independent rating agencies – by applying individual methodologies and evaluation models, the ESG performance assessment is usually expressed as a single score or rating allowing for direct

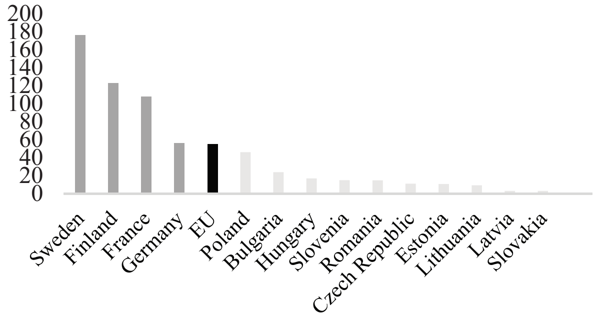

Figure 2. Stock market capitalization as a percentage of GDP (source: created by authors based on CEIC data for 2020)

evaluation and comparison (Berg et al., 2019). However, rating availability is currently an unresolved challenge. According to the OECD, the rate of the ESG rating availability is relatively low – in the Europe it is around 10% (OECD, 2020). It is relatively higher when measured by the size of market capitalization implying that there is a tendency in the favour of the greater market capitalization companies to be awarded an ESG rating. This in turn further takes the investment interest away from the smaller stock market participants.

Consequently, it results in a lower ESG score availability. Recent research evaluating a sample of all European companies having an ESG rating from the Thomson Reuters EIKON database as of January 2019, found that only 3% of the companies represented the CEE region highlighting the largely missing data inputs (Iamandi et al., 2019). Similar results were shown by Zumente and Lāce (2021) – from a sample of 2001 CEE stock listed corporations, the most common sustainability score available was the RobecoSAM sustainability ranking (available to 54 companies), while the MSCI ESG score was available to 19 companies and the Sustainalytics score was awarded to only 7 CEE listed companies.

All in all, the limited availability of the ESG measurement scores so far has also hindered an evaluation of the sustainability's impact on the financial performance of the companies in the CEE.

2. Data and methods

To explore the potential impact of the ESG score availability, disclosure level, and sustainability performance on the stock returns and financial performance, a dataset was created based on data retrieved from the Bloomberg database. The financial data for all stock listed companies of the 10 CEE countries (Estonia, Latvia, Lithuania, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Romania and Bulgaria) were retrieved along with the available Bloomberg ESG disclosure scores and RobecoSAM ESG performance ratings. The Bloomberg ESG disclosure quantified on a scale from 0 to 100 does not measure the sustainability performance, but rather the transparency of the company. The areas included in the score comprise more than 800 metrics related to emissions, shareholder rights, employees, etc. The higher the volume of information disclosed, the higher the disclosure score (Bloomberg, 2022).

With respect to the ESG performance, RobecoSAM sustainability ratings were chosen. The data source of RobecoSAM ratings is the Corporate Sustainability Assessment (CSA) survey – an annual questionnaire filled by large companies globally since 1999 and allows companies to report their sustainability performance. In 2021, the list of CSA invited companies comprised 5000 global corporations (S&P Global, 2021). According to previous research, especially this rating had the highest coverage across the stock-listed CEE companies (Zumente & Lāce, 2021).

Also, the current data selection process as of January 2022 confirmed the previously documented – from 2004 CEE stock listed issuers only 56 (or below 3%) had external ESG score available. RobecoSAM was the score provider most frequently available (see Table 1), while other popular ratings such as MSCI and Sustainalytics had only 21 and 7 scores, respectively.

Table 1. Statistics of the sample data (source: created by authors)

	N	Min	Max
ESG disclosure score	65	5.7	69.7
RobecoSAM ESG score	56	0	89
MSCI ESG rating	21		
Sustainalytics rating	7		
Total companies in the sample	2004		

With respect to the financial performance the research variables were split into two groups – the market performance measured by annualized returns for three- and five-years periods (retrospective as of January 22, 2022) as well as the Tobin's Q and the financial performance measured by revenue growth (five-year cumulative average growth rate (CAGR)) and return on assets (ROA) as latest figure available on January 22, 2022.

Given the rather low degree of the available observations in the sample, quartile analysis was chosen to assess the potential ESG impact on the financial returns. Quartile analysis has been previously employed in the ESG research i.e. by (Dorfleitner et al., 2015). For the purpose of this study, two separate quartile divisions were chosen – firstly, based on the ESG disclosure score and secondly, based on the RobecoSAM ESG performance score.

3. Results and discussion

The ESG and its related performance in CEE is yet in the development phase, and so is the degree of disclosure. The average ESG disclosure score for the sample companies was 36.1, while the average ESG performance score ranked at 35.1, which can be evaluated as rather modest. The level of ESG disclosure and performance theoretically can be also very different from country to country, albeit it is hardly possible to draw any overarching results due to the limited ESG score availability. Warsaw listed companies strongly dominate the available data universe (with 32 companies having a disclosure score and 43 companies with an awarded ESG performance rating). While the disclosure score availability is more dispersed across the individual CEE countries (only Bulgaria's companies are not represented in the sample), the ESG performance score is strongly underrepresented in the Baltic region and Southern CEE countries.

The results of the stock return analysis by the ESG disclosure score quartiles each consisting of 16 to 17 companies show no clear relation between the non-financial transparency and improved stock market performance. The data shows the rather reverse trend of more modest stock return growth for the more sustainability-transparent companies (Figure 3).

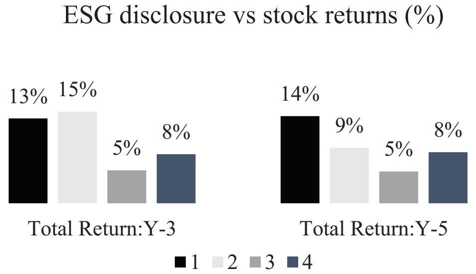

Figure 3. Stock returns by ESG disclosure score quartiles (source: created by authors based on Bloomberg data for 2019–2022 and 2017–2022)

Also, Tobin's Q (as the measurement of firm's intrinsic value of its physical assets relative to its market valuation) shows rather a reversed relationship to higher ESG disclosure scores – with the highest Tobin's Q measures relating to the lowest scoring quartiles (Figure 4).

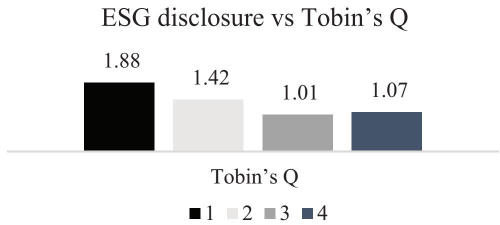

Figure 4. Tobin's Q by ESG disclosure score quartiles (source: created by authors based on Bloomberg data as of Jan 22, 2022)

Similar picture (Figure 5) emerges from comparing the non-financial disclosure level to the profitability (ROA) – the lowest scoring companies have achieved the highest level of profitability. The only differing result is seen for the historic growth as measured by 5-year CAGR. Based on this measure, companies belonging to the higher ESG transparency quartiles have shown higher revenue growth. This result is broadly line with the findings of (Dhaliwalet al., 2014), who have documented that higher sustainability disclosure is associated with better long-run growth prospects. In the context of the CEE countries, the causality of the relationship, however, remains unclear – meaning, it can not be clearly concluded whether the higher growth rate is a direct result of higher corporate sustainability disclosure or are the fastest growing companies paying more attention to extensive ESG reporting.

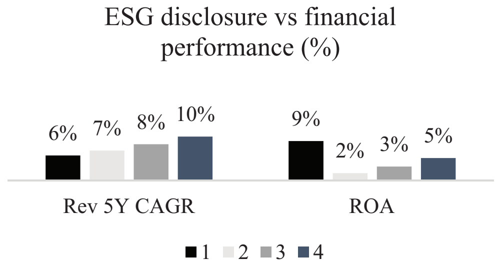

Figure 5. Financial performance by ESG disclosure score quartiles (source: created by authors based on Bloomberg data for Rev CAGR 2016–2021 and ROA for the last financial year as of Jan 22, 2022)

When dividing the companies analyzed into quartiles according to the RobecoSAM ESG score, the results show that CEE companies with above average quality of ESG performance do not show significantly different results from the lower scoring peers. In terms of the stock market performance (Figure 6) no clear pattern can be observed.

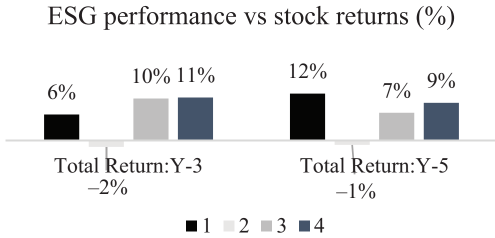

Figure 6. Financial performance by ESG performance score quartiles (source: created by authors based on Bloomberg data for 2019–2022 and 2017–2022)

A differing result is seen for the Tobin's Q measure (Figure 7), which shows above average result for the companies in the highest ESG scoring quartile. It is interesting that no coherent pattern can be found in terms of gradual trend as the lowest scoring companies show the second-best Tobin's Q level.

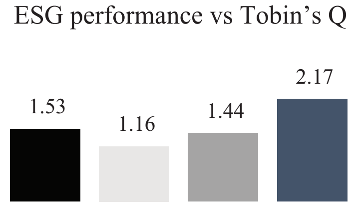

Figure 7. Tobin's Q by ESG performance score quartiles (source: created by authors based on Bloomberg data as of Jan 22, 2022)

Finally, contrary to results of (Gregory et al., 2014) and (Henisz et al., 2019) the sample of CEE stock-listed corporations do not support the link between higher sustainability performance and increased long-year revenue growth. In respect to the profitability, while the most sustainable company quartile indeed shows the highest ROA, the link across the other quartiles is mixed, thus no direct relationship can be derived.

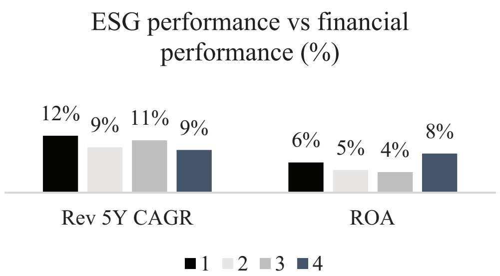

Figure 8. Financial performance by ESG performance score quartiles (source: created by authors based on Bloomberg data for Rev CAGR 2016–2021 and ROA for the last financial year as of Jan 22, 2022)

All in all, the results of the ESG disclosure score analysis show that CEE capital markets so far have not appreciated higher non-financial transparency. The only differing metrics that currently seem to show a positive trend is between the ESG transparency and revenue growth, which go in line with the findings of Dhaliwal et al. (2014) concluding that higher sustainability disclosure is associated with better long-run growth prospects.

With respect to ESG performance, the findings about the positive impact of sustainability performance on the firm's value as measured by Tobin's Q and profitability are rather inconclusive due to the result that only the highest scoring quartile companies show above average results.

The results overall are rather contrary to the global trends that can nowadays be seen in the academic literature. As the vast majority of the global studies find a non-negative relationship between the ESG and corporate financial performance, the results of the CEE companies show that no clear trends are still currently present in these markets.

One potential explanation might be that the positive effect documented elsewhere is still lagging in such emerging markets as the CEE. This explanation could be in line with the research by Saygili et al. (2021) that also have not found a positive ESG impact on the corporate financial performance for the Turkish listed companies.

Another explanation could lie in the limited sample size. With respect to the limitation of this study, it has to be mentioned that it is strongly impacted by the data availability. The limited external sustainability rating coverage hurts not only the companies themselves due to negative investor interest implications, but also the scope of academic evidence about the specific region. Given this limitation, it might be interesting to examine whether the use of individual methods for qualitative / quantitative analysis of the disclosed information in order to assign a relative ESG performance score could yield a different result when examining a wider CEE corporation sample, thus such an approach can be suggested for further research.

Conclusions

The present study aims to tackle the topical question of the ESG impact on the corporate financial performance in the context of corporations that are stock-listed across the 10 emerging economies of Central and Eastern Europe. As summarized by global meta studies the vast majority of the studies confirm a positive or at least a non-negative relationship between the corporate sustainability level and financial performance, with an increasing trend over time.

The results of this study show that the CEE capital markets so far have not appreciated higher non-financial transparency showing no improved stock returns, profitability or company value for high-disclosure companies. A positive relationship is found between the ESG transparency and revenue growth, which go in line with the previous findings documenting higher growth prospects for companies engaged in more thorough ESG reporting.

With respect to the ESG performance, no distinct relationship is found with the stock returns. With respect to the firm's value as measured by Tobin's Q and profitability, the findings are rather inconclusive due to the result that only the highest scoring quartile companies show superior outcomes.

All in all, the results indicate that the positive impact of the ESG on the financial metrics is still lagging in the CEE markets, potentially showing the upside of the effect that could develop in the forthcoming years similarly to the global trends of the largest corporations. The study therefore adds value to the investors, which consider investments in the CEE markets and are using external rankings to decide on their investments following sustainable investing strategies. As similar results are also found by other studies for the Turkish market, the effect might be extending also to other emerging economies. The exploration of additional emerging economies and comparison to the Western Europe countries and the US could therefore be suggested for the future research.

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Contribution

Conceptualization, I.Z.; funding acquisition, N.L.; investigation, I.Z.; methodology, N.L and I.Z.; project administration, I.Z.; supervision, N.L.; writing – original draft, I.Z. All authors have read and agreed to the published version of the manuscript.

Disclosure statement

The authors do not have any competing financial, professional, or personal interests from other parties.

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