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## THE ROLE OF CREDIT RATING OF THE ESG DEBT INSTRUMENTS ISSUERS

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**ABSTRACT:** The aim of this article is to assess whether having a creditworthiness assessment from more than one credit rating agency by issuers of ESG debt instruments affects the number of issues and the average amount issued. The empirical research was carried out using the observation method and the analysis of source documents. In the analysed period, 53.38% of issuers received ratings at least from one CRAs as S&P, Moody's, and Fitch. The results of the conducted research indicate that the number of ESG debt instruments and the average issue amount were affected by the number of ratings given to the issuer. A database collected from Refinitiv Eikon for the period between 2012 and 2021 allows us to conclude that it is enough to have two credit ratings. The conclusions of this study can be used in the process of obtaining financing for ESG projects.

**KEYWORDS:** ESG, credit rating, bonds

## Introduction

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There is an increase in interest in sustainable, socially, environmental and climate-stable development of the economy. However, the level of investment is insufficient to prevent adverse climate change, such as limiting global warming.

Increased awareness of investments focused on environmental and social factors contributes to the increase in the supply of debt instruments, the purpose of which is to finance projects related to the establishment of ESG criteria (environmental, social, and management).

A question therefore arises – does the issuer's fulfilment of criteria related to the environment, management or social relations affect the assessment of its creditworthiness?

Credit ratings are used when investors make investment decisions to estimate the credit and default risks. Thus the knowledge about the impact of the ESG measures on credit ratings is very important. Using credit ratings given by external credit rating agencies will help to assess the mentioned phenomenon. It is still noticed a small number of studies about the impact of ESG policies on the probability of default.

Accordingly, there is a research gap relating to the role of ESG information in the granting of credit ratings to issuers by credit rating agencies. Therefore, the number of ratings held by issuers of ESG instruments was examined.

The aim of the article is to assess whether the fact that issuers of ESG debt instruments have a credit rating from more than one agency has an impact on the number and average amount of issues. This goal was achieved through the process of analysing the ratings assigned by the selected largest rating agencies. The results of the study will allow the credit rating to be considered in the process of raising debt capital for purposes related to meeting the ESG criteria, including counteracting the negative effects of climate change.

As regards the structure of this study, its first section presents an overview of the literature on the subject, with particular emphasis on the analysis of credit ratings by the three largest agencies. In the empirical part, the differences in the given credit ratings between the agencies were analysed. Moreover, the paper captures the impact of having the ratings assigned by the rating agencies on the number of issues and the average amount of the issued ESG instrument. The article ends with conclusions regarding the role of credit rating of the ESG instrument issuers in raising capital.

## An overview of the literature

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As ESG is weighted in terms of environmental, social and management factors, the company engages in these activities at different levels (Duque-Grisales & Aguilera-Caracuel, 2021). The environmental criterion covers climate change and issues such as energy consumption, waste management, and pollutant emissions. Social criteria include respect for human rights and the promotion of diversity and equality among employees, irrespective of gender, origin or sexual orientation. An important element of the social criterion is also paying attention to the needs of customers and taking care of relations with the local community. The management aspect concerns issues such as respecting the rights of shareholders. Companies having different stakeholders (employees, local communities and societies) have an ethical responsibility to respond to their diverse environmental, social and governance expectations to maximise value for stakeholders. Attention should also be paid to the needs of shareholders (Yamahaki & Frynas, 2016).

A growing number of investors focus on the profitability of investment strategies and look for their social value. ESG investing fulfils this goal. These are non-financial factors that investors use to evaluate an investment as well as the issuer. ESG looks at the company's environmental, social, and governance practices, as well as traditional ones. ESG investors believe that investments in companies employing ESG practices may have a material impact on their investments' profitability and risk. Lo and Sheu (2007) indicate that companies with sustainable development strategies are more likely to be rewarded by investors with a higher valuation of their assets.

Due to Friede et al. (2015), in order to use the ESG criteria, it is necessary to integrate them with investments. There are several ESG factors that are helpful in assessing the performance of an investment. Investments with high ESG performance may increase the rate of return, while those with low ESG performance may inhibit them. ESG ratings can be viewed as „company ratings based on a comparative assessment of its quality, standards and performance in environmental, social and governance issues” (Wong, 2018).

The ESG assessments objectively and effectively evaluate a company's ESG efforts through its competitive advantage, social reputation, and operational performance. The ESG risk assessment measures are provided by RobecoSAM, Sustainalytics, CDP (Carbon Disclosure Project), ISS (Institutional Shareholder Services), MSCI ESG Research, FTSE Russell, Bloomberg, Standard & Poor's Global and Moody's. The agencies provide ESG assessment services for investors (Avetisyan & Ferrary, 2013). The ratings are similar to those issued by credit rating agencies but with an emphasis on meeting ESG criteria. They measure the issuer's exposure to industry-specific ESG risks

and the way it manages them. As the number of ESG rating providers increases, there are differences in methodologies and final ratings (Avetisyan & Hockerts, 2017). However, all rating providers refer to the company's ESG practices. Therefore, the ESG rating agencies influence the behaviour of companies and investors (Galbreath, 2013).

Zerib (2019) and Pedersen et al. (2021) examined the impact of ESG investing on asset prices, assuming that some investors derive utility from investing in assets with high ESG performance. Goldstein et al. (2022) analysed how information about these results reaches asset prices through investors. Uncertainty about ESG payouts has been described by Avramov et al. (2021). A comprehensive analysis of the implications of sustainable investment equilibrium and an analysis of welfare and social impact was the work of Pastor et al. (2021).

Theories of legitimacy and stakeholders provide a solid theoretical basis for the relationship between environmental, social and governance (ESG) disclosures and financial performance (Qureshi et al., 2020). Transparent ESG information proves that companies are actively taking environmental and social responsibility, thereby improving their reputation with consumers and investors, gaining access to capital at a lower cost and increasing competitive advantage (Bofinger et al., 2022; Gillan et al., 2021). While rating agencies assign different ESG ratings to the same company due to different ESG keywords and weights selected, which can lead to different conclusions (Clementino & Perkins, 2021).

Zeidan et al. (2015) suggest that the ESG objectives are not clearly defined and do not apply to the lending policy. According to Friede et al. (2015), ESG ratings are not used by financial institutions, even if they are relevant to investment decisions. At the same time, Jang et al. (2020) suggest that ESG activity, apart from its impact on moral capital, may also generate financial benefits, in particular for bond issuers. Thus, ESG, being an important pillar of corporate social responsibility in the development of sustainable strategies, has an impact on the financial results of enterprises (Eccles & Serafeim, 2013). On the other hand, activities related to the fulfilment of ESG criteria may improve the financial value of some entities but weaken it in the case of others (Humphrey et al., 2012). Meeting the ESG criteria also generates additional costs for the enterprise (Derwall et al., 2005; Semenova & Hassel, 2008), which has an impact on the financial results.

The relationship of ESG with the financial performance of enterprises in developed markets was the subject of many studies (Waddock & Graves, 1997; McWilliams & Siegel, 2000; Lee et al., 2016). The results of the linear model developed by Nollet et al. (2016), using Bloomberg's assessment of the Environmental Social Governance Disclosure for S & P500 companies in 2007-2011, suggest that there is a significant negative relationship between

return on capital and corporate social performance. While Van Beurden and Gössling (2008) received empirical evidence for a positive correlation between the social and financial performance of enterprises.

Credit Rating Agencies (CRAs) have different probabilities of default. However, studies comparing Moody's, Fitch, and Standard & Poor's ratings have found strong similarities in credit ratings (Ammer & Packer, 2000). CRA's use different symbols to denote the rating given to issuers of debt instruments. However, the differences are slight, and it is easy to see the relationship between the symbols. CRA's products are similar (Candelon et al., 2014). The ratings are divided into two categories: investment rating and speculative rating. Credit ratings are used to assess the probability of default (Kang & Qiao, 2007; Matthies, 2013). Choy et al. (2006) showed that there is a strong correlation between credit ratings and the probability of default. However, the higher the credit rating, the lower the risk of default. From the issuer's perspective, credit ratings affect the cost of debt and access to financing (Gray et al., 2006). It is very important to know the factors that influence a company's credit ratings (Birindelli et al., 2015). Attig et al. (2013) state that credit rating agencies tend to give relatively high ratings to companies fulfilling environmental and social criteria. The transparency of reporting environmental, social and governance performance and their relationship to the credit ratings of listed companies also play an intermediate role (Li et al., 2022). ESG actions benefit society by increasing transparency and can also benefit companies by reducing their financing costs by reducing investors' perception of default risk. How the number of creditworthiness ratings of issuers of green debt instruments affects the number of issues and the average amount issued was the subject of the Frydrych study (2021). The results indicate that the number of green debt instruments and the average amount of the issue were influenced by the number of ratings assigned to the issuer. The largest number of green debt instruments and the highest average issue amount were held by issuers of green bonds with three ratings.

In view of the above, the author hypothesises that having a credit rating by issuers from at least one of the selected agencies (Moody's Investors Service, Standard & Poor's (S&P) and Fitch Group) has an impact on the number and average amount of ESG debt instruments issued.

## Research methods

The analysis covers the credit rating of the issuers of ESG debt instruments issued in the years 2012-2021. The dataset provides information on all types of ESG debt issuers. Their geographical spread covers the whole world, all sectors of activity. The study includes only the instruments which were in the circulation on 31st of December 2021.

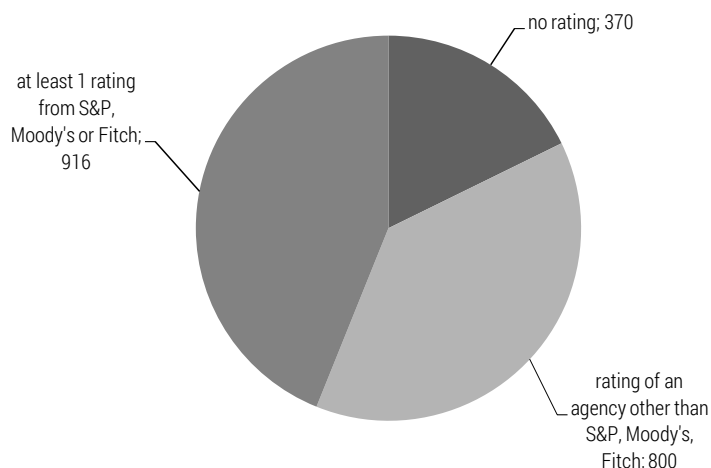
The research material in this paper includes – apart from the analysis of literature – a method of observation, analysis of source materials, and deduction. The paper utilises the data from Refinitiv Eikon.

The study assessed whether having a rating from more than one agency and from which of the analysed CRAs, has an impact on the number of issues and the average number issued. In order to allow the data to be compared with each other and for further analysis, the ratings were converted to numeric and then compared. Thereafter, the author has examined which agencies (among S&P, Moody's, and Fitch) most often gave the ratings to issuers of the ESG debt instruments. Therefore, only credit rating given by those agencies were analysed. Moreover, it has been checked whether the issuers were rated by one or more agencies and which agency awarded the highest and lowest credit rating. Furthermore, the differences in ratings between the agencies and what rating was given most frequently have been examined.

For this purpose, issues of 916 issuers of ESG debt instruments have been analysed. The analysis included bonds as well as notes and others ESG instruments. Moreover, the average amount of issued papers were given in USD.

## Results of the research

In the years 2012-2021, ESG instruments were issued by 2086 issuers. Only 17.74% of issuers have no credit ratings. Moreover, credit rating assigned by others CRA's than S&P, Moody's and Fitch had 800 issuers (Figure 1). While 43.91% issuers had credit ratings at least 1 rating from S&P, Moody's, or Fitch.



**Figure 1.** The number of credit ratings of the ESG instruments issuers

Source: author's work based on Refinitiv Eikon [01-01-2022].

As can be seen in Table 1, one agency gave a credit rating to 41.92% of the issuers; two agencies gave a credit rating to 38.21% of the issuers, while three agencies gave a credit rating to 19.87% of the ESG instruments issuers. The highest average amount of issue applied to issuers with three credit ratings. However, the largest average number of instruments were issued by issuers with two credit ratings (Moody's and Fitch). On the other hand, issuers with a rating only from Moody's issued the lowest average value of a ESG instrument, while the rating given to an issuer only by Fitch determined only nearly two issues per issuer.

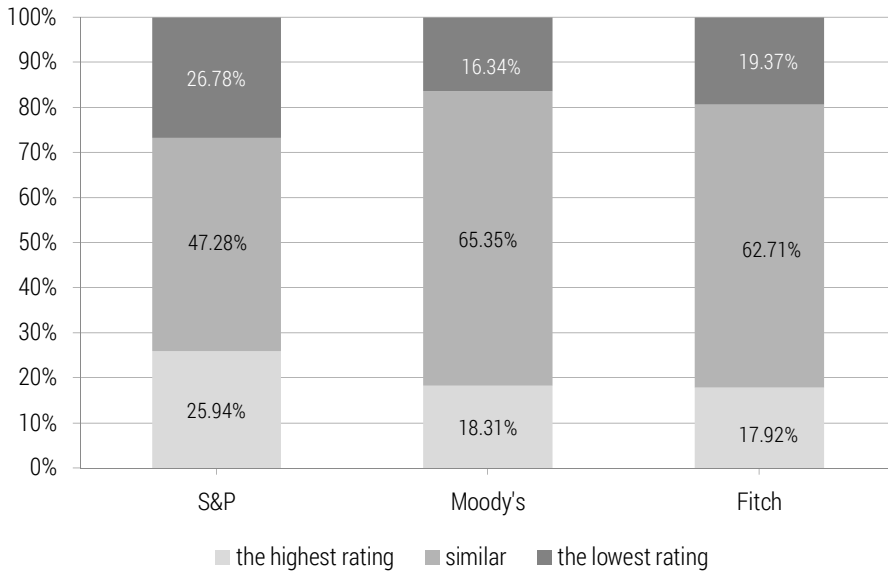
**Table 1.** The number of ratings assigned by selected CRAs vs. number of issues and average amount issued [USD]

S&P	Moody's	Fitch	Issuers	Number of issues	Average Amount Issued [USD]
x			214	532	278 084 183
	x		73	407	121 243 354
		x	97	189	383 715 842
x	x		119	483	419 593 989
x		x	177	565	628 643 767
	x	x	54	480	287 005 000
x	x	x	182	1181	768 603 470

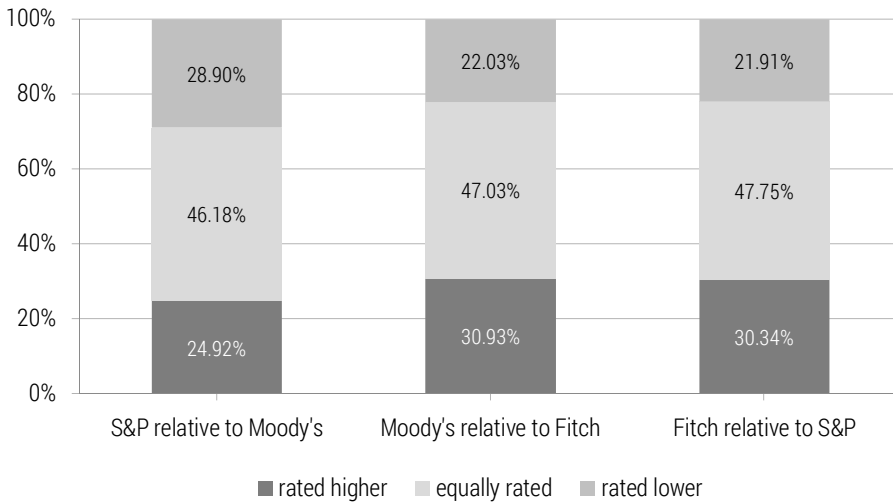
Source: author's work based on Refinitiv Eikon [01-01-2022].

The S&P awarded the highest number of ratings – 42.58%. Moody's, on the other hand, assigned 26.34% and Fitch 31.08% of ratings. Since 532 issuers of ESG instruments have two or more credit ratings, the second stage of the research focused on the comparison of the highest and lowest credit ratings awarded by selected CRAs and the difference in the credit ratings between the agencies. For this purpose, the issuers who received the ratings from two or three agencies were analysed. The issuers who received the rating only from one agency were excluded from this sample.

The comparison of the highest and lowest credit rating awarded by S&P, Moody's and Fitch led to some conclusions. S&P gave the highest rating to 25.94% of the issuers. Whereas Fitch only to 17.92% of the issuers. When analysing the lowest grade received by the issuers, the situation looks similar. S&P gave the lowest rating to 26.78% of the issuers while Moody's to 16.34% of the issuers of the ESG instruments (Figure 2). Moody's gave similar credit ratings as others CRA's to 65.35% of the ESG instruments issuers.



**Figure 2.** The highest, the lowest ratings of CRA  
 Source: author's work based on Refinitiv Eikon [01-01-2022].



**Figure 3.** Ratings differences between agencies  
 Source: author's work based on Refinitiv Eikon [01-01-2022].

Furthermore, there are some differences in the ratings given to issuers between agencies (Figure 3). Moody's rated higher than Fitch in 30.93% of the cases and the S&P ratings were lower than Moody's in 28.90% of the



cases, whereas Fitch gave similar ratings to S&P in 47.75% of the cases and similar ratings to Moody's in 47.03% of the cases. When comparing the Moody's with the S&P ratings, 46.18% of the issuers received the same rating. The Fitch ratings were higher than S&P ratings only in about 30.34% of the cases and lower than the S&P's ratings in 21.91% of the cases.

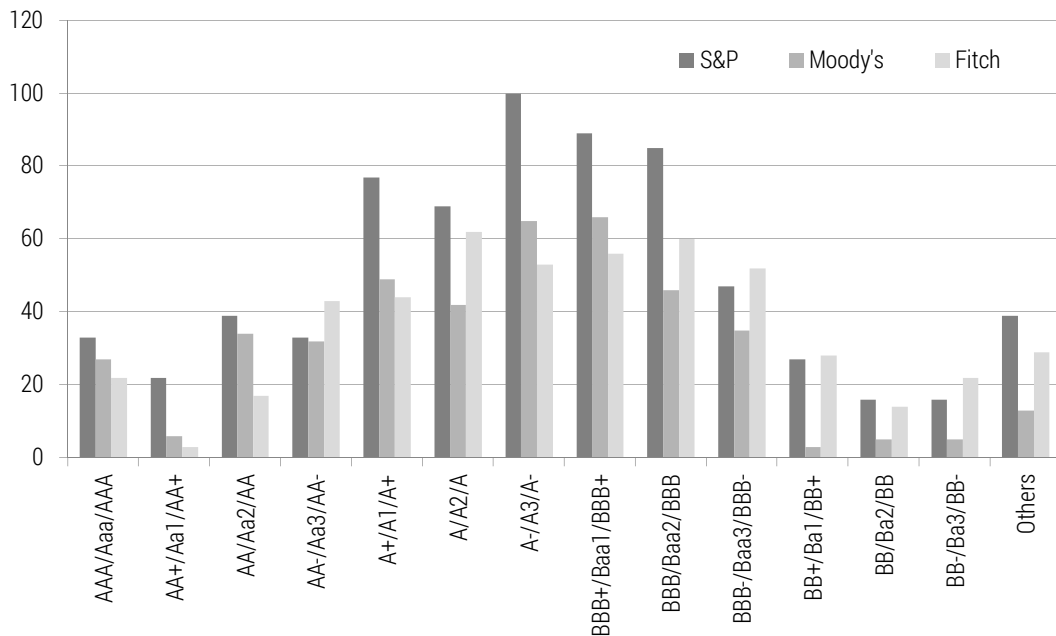


Figure 4. Ratings assigned by Moody's, Standard and Poor's and Fitch

Source: author's work based on Refinitiv Eikon [01-01-2022].

The Figure 4 shows that A-/A3/A- and BBB+/Baa1/BBB+ ratings prevail among the ratings given to the issuers. The low credit risk was awarded 218 times, with 100 issuers receiving such ratings from Standard & Poor's, 65 from Moody's and 53 issuers receiving such rating from Fitch. The moderate credit risk was awarded 211 times, with 89 issuers receiving such ratings from S&P, 66 from Moody's and 56 issuers receiving such rating from Fitch. Whereas the highest quality credit rating (AAA/Aaa/AAA) was given 82 times. In default, credit rating was not assigned at any time by CRA's among the ESG instruments which were in the circulation on 31st of December 2021. Whereas others contain the credit ratings from B to CCC awarded to the ESG instruments issuers.

## Conclusions

The purpose of this article was to analyse the impact of the number of credit ratings of an issuer of the ESG instruments on the number of issues and average amount issued. This basically means proving whether a higher number of ratings for an issuer that incurs additional costs result in more issues and average amount of the ESG instruments issued.

During the period under analysis, 82.26% of issuers had credit ratings, while 370 issuers were not rated. Taking into account the number of credit ratings assigned by CRAs to issuers of ESG instruments, the 53.38% rated issuers received ratings from one CRAs as S&P, Moody's and Fitch. Therefore, the research based on data collected from the Refinitiv Eikon Database for the period between 2012 and 2021 allows us to conclude that the higher number of issuer's ratings results in the higher number of issues. It is enough to have two credit ratings issued by replaced agencies. However, it is worth to add that the ratings should be given by Moody's and Fitch. In contrast, issuers with three ratings issued the highest average value of ESG bonds. The issuers with only one rating, assigned by Moody's, had the lowest average value of issues. On the other hand, the lowest average number of issues was recorded by issuers with only one Fitch rating. Research conducted by Frydrych (2021) on green bonds confirms the required number of ratings for the average value of the issue. While for green instruments it is sufficient for the issuer to have two credit risk assessments also for the highest average value of the issue.

In addition, credit ratings assigned to issuers by Standard & Poor's were 28.90% below Moody's and those assigned by Moody's were 22.03% below Fitch. In addition, Moody's gave higher ratings than Fitch to 30.93% issuers of ESG instruments and Fitch gave higher ratings than Standard & Poor's to 30.34% gave lower ratings than 30.34% of entities and a similar credit rating to over 47.75% of entities. The most common credit ratings assigned by CRAs were A-/A3/A- and BBB+/Baa1/BBB+. On the other hand, among the ratings assigned to issuers of Eurobonds from Central and Eastern European countries, the Baa/BBB/BBB rating prevails (Frydrych, 2020). This means that issuers of debt instruments ESG, which stands for environmental, social, and governance have a higher creditworthiness rating.

On the grounds that there are also considerations other than the issuer's credit rating that affect the average value and number of debt instruments issued, this study has numerous limitations which render it difficult to make decisions about the number of credit ratings and from which CRAs.

The source literature does not include many studies comparing the credit ratings of ESG bond issuers. The conclusions of this study can be used in the

process of obtaining debt financing for purposes such as climate improvement. The similar analyses may be conducted also for issuers of other debt instruments. The further research should also explain the impact of a changing credit rating of the issuer during the ESG bonds term.

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