The use of non-financial performance metrics in determining directors' remuneration: The case of listed companies in South Africa

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Abstract

Despite the increasing importance of environmental, social and governance (ESG) factors, it is not fully understood whether companies consider these factors when designing compensation plans for their directors. This study investigated the extent to which directors' remuneration integrates ESG factors. The study sample is made up of JSE-listed companies for the period 2015 to 2021. The estimated generalised least squares regression technique was used to analyse the data. The results show the shift towards the integration of ESG factors in directors' compensation plans. It should be established which ESG factors are pertinent in the South African context.

1. Introduction

Directors' remuneration is a corporate governance mechanism that could be used to ensure that directors are incentivised to achieve the organisational goal of shareholder wealth maximisation (Al Farooque et al., 2019; Sánchez et al., 2020). This argument is premised on the simplistic principal-agent theory that was first pioneered by Jensen and Meckling (1976). According to this theory, directors serve as agents for shareholders who have become distanced from the day-to-day operations of the company as the principals. The interests of executives should therefore be aligned with those of shareholders. The extent of alignment has primarily been measured through accounting-based (ABM) and market-based performance (MBM) measures. ABM relates to the company's bottom line or profit, whereas MBM deals with the classic notion of shareholder wealth maximisation (Hussain, Rigoni & Cavezzali, 2018). The most widely accepted notion

of shareholder wealth maximisation is that managers should strive to maximise total shareholder return (TSR) for a certain level of risk. Shareholder primacy is at the heart of this principal-agent theory (Mejia, 2019; Palladino, 2021).

Directors, through their compensation packages, have therefore been mostly focused on the maximisation of profits and share prices because that is what they have been rewarded to do (Amewu & Alagidede, 2021). Proliferation of corporate scandals such as Glencore and Bain & Company are testament to the inherent shortcomings of the laser focus on profits and share price maximisation through stock options in an attempt to maximise shareholders' wealth (Bhagat & Bolton, 2014; Fahlenbrach & Stulz, 2011, Faulkender Kadyrzhanova, Prabhala & Senbet, 2010; Sharma & Singh, 2018). At the heart of the shortcomings of this approach is the fact that only the shareholders and executives receive the lion's share of any value created in the organisation to the exclusion of other stakeholders (Bouaziz, Salhi & Jarboui, 2020). The United States is not an exception to these scandals. South Africa has its own fair share in terms of Tongaat-Hullet Limited, Steinhoff International Holdings N.V, Bosasa Group, and many other corporates (Day, 2020; Rossouw & Styan, 2019).

As the profits, share prices, and dividends increase, the executive compensation also tends to increase (Matemane, Moloi & Adelowotan, 2022). This is because the bulk of the executive compensation is bonuses and share-based payments (Salehi et al., 2018). It is this pattern of increase in executive compensation, sometimes without the commensurate improvement in companies' financial and ESG performance, that has resulted in several debates on the topic (Sheikh, Shah & Akbar, 2018; Zoghlami, 2021). The corporate scandals discussed above are also linked to executives' desire to extract rents and maximise their remuneration (Jiang, Kling & Bo, 2021).

According to Van Zyl and Mans-Kemp (2020), directors' remuneration is among the corporate governance areas that needs special attention due to its contribution to corporate scandals in South Africa. At the heart of the debate is the fact that challenges faced by society such as climate change, pandemics, rapid technological challenges, diversity, equity, and inclusivity should be considered by companies and those in charge of governance (Kana, 2020). Companies should therefore be conscious, sensitive, and responsive to all the issues affecting society because such issues remain a threat to their sustainability and ability to continue operating (Settembre-Blundo, González-Sánchez, Medina-Salgado & García-Muiña, 2021).

A growing body of literature has shown that companies that focus solely on profits and neglect social issues are not sustainable in the long-run (George & Schillebeeckx, 2022; Settembre-Blundo, González-Sánchez, Medina-Salgado & García-Muiña, 2021). This brings into question the applicability and relevance of the shareholder primacy model and the basic agent-principal theory (Signori et al, 2021). This is not only because the other stakeholders such as customers, employees, and communities have been asking tough questions pertaining to companies' responses to social and environmental issues, but also because the shareholders themselves have also been asking such questions in

addition to embarking on activism and responsible investing endeavours (Harrison et al., 2020; Signori et al., 2021).

According to Bussin (2015), literature on executive compensation is abundant but has a number of flaws. First, it mainly assumes the basic agent-principal theory, the applicability of which is now questionable because all the relevant stakeholders, namely employees, customers, regulators, and society at large, are becoming increasingly important in corporate governance (Esser & Delport, 2017; Ezeani & Williams, 2017). Second, the literature is dominant in the Global North and developed countries (Amewu & Alagidede, 2021). Third, the literature mostly investigates the relationship between executive compensation and a company's financial performance, leading to inconclusive results (Bussin, 2015). Fourth and most important, ESG performance has never been brought into equation when interrogating the pay-performance relationship (Alves & Lourenço, 2022; Harjanti & Farhan, 2022). Literature on directors' remuneration therefore predominantly focuses on financial performance measures, despite the current trends and pressure on companies to track and measure ESG performance.

The novelty of this study lies in its shift from a simple principal-agent theory to incorporating a multiplicity of theories, namely, legitimacy theory and stakeholder theory. Incorporating ESG performance is another unique contribution that this study adds since the literature predominately focused on financial performance measures. By understanding the role that ESG performance plays in the design of directors' remuneration packages, policymakers could assess the extent to which directors as the stewards of ordinary shareholders' funds are held accountable in contributing to the attainment of the SDGs.

ESG rating from Financial Times Stock Exchange (FTSE) Russell was used as an independent variable alongside the financial performance measures to investigate the extent to which the directors' remuneration integrates non-financial performance measures. Therefore, secondary data from IRESS, FTSE Russell and companies' integrated reports was collected and analysed using the estimated generalised least squares (EGLS) regression model. The rest of the article discusses the literature and the theoretical foundations of the study. This is followed by the research design and methodology. Results and discussion are then presented. Lastly, a conclusion and recommendations for future studies are discussed.

2. Theoretical framework

According to Rönnegard and Smith (2018), decision-making in the corporate sector has largely been driven by the shareholder primacy model and notion of shareholder value maximisation. This is indeed evident in executive compensation literature which narrowly focuses on the earliest principal-agent theory that only puts the shareholders and executives at centre stage (Davis et al., 2019; Lozano-Reina & Sánchez-Marín, 2020). This theory was pioneered by Jensen and Meckling (1976) in the Western economies whose contextual setting is markedly different from those of the developing and emerging

economies such as South Africa. Contrary to many Western economies, the contextual setting in South Africa is characterised by high unemployment, poverty, and inequality (Odeku, 2021; Wakefield, Yu & Swanepoel, 2022).

In addition to the corporate scandals mentioned with regard to governance, South Africa also stands to suffer the most from any possible consequences of climate change in comparison to its counterparts in the developed economies (Dai, Mamkhezri, Arshed, Javaid, Salem & Khan, 2022). Agency theory suggests that the executive compensation should incentivise management to act in the best interest of the shareholders (Jensen & Meckling, 1976). A few South African studies on executive compensation such as Deysel and Kruger (2015), Marimuthu and Kwenda (2019), and Padia, Naik and Callaghan (2020) are also based on principal-agent theory.

However, agency theory alone only provides a superficial understanding of a complex pay-performance relationship. In the current era, shareholders are no longer the only key stakeholder but customers, employees, and society at large have become important participants in the corporate sector (Post et al., 2002; Signori et al., 2021). Furthermore, the South African context where poverty, unemployment, and inequality are rampant (Kerr & Wittenberg, 2021; Viviers, 2015) begs public good actions not only from the government but from the private sector as well.

Climate change, rapid technological changes, and Covid-19 have only laid bare the redundancy and irrelevance of principal-agent theory when used to understand the directors' remuneration landscape (Vogel & O'Brien, 2022). Companies do not only need a legal license to operate but also a social license as society is becoming more and more vocal and influential on companies operating in their backyards (Van der Meer & Jonkman, 2021).

This study therefore advocates for multiple theorical lenses that the executive compensation phenomenon can be understood through. These theories include the legitimacy theory and stakeholder theory, in addition to the principal-agent theory. In a quest to legitimise their existence, gain a social license to operate, and treact to pressure from society, companies should disclose financial and non-financial information (An et al., 2011; De Villiers & Marques, 2016; Deegan, 2002). Therefore, legitimacy theory does not only focus on shareholders, but is also concerned with the interest of society at large. Deegan (2002) argued that the legitimacy theory involves a social agreement between the entity and society. Companies should not only be seen meeting the expectations of the societies within which they operate, but they should also actively take actions that align their business with such expectations (Mio et al., 2020).

Stakeholder theory indicates that a co-operative and collaborative relationship between the company and all its stakeholders is required to create and sustain value for the benefit of all participants over time (Freeman, 2010; Freudenreich et al., 2020; Lüdeke-Freund & Dembek, 2017). It is this collaboration with other stakeholders and their expectations that companies should respond to pertinent issues affecting them that has culminated in demands for companies not to narrowly pursue profits at the expense of sustainability,

humanity, and nature (Henisz et al., 2014; Sisodia et al., 2007). Dragomir, Dumitru and Feleaga (2022) lament the proliferation of non-financial reporting frameworks. Such proliferation of different reporting frameworks on non-financial information and the emergence of an ESG philosophy are arguably all predicated on legitimacy and stakeholder theories (Breijer & Orij, 2022; Schröder, 2022).

Because companies should be accountable to the multiple stakeholders and not only the shareholders, this study suggests that the executives of companies operating in South Africa should be incentivised to be responsive to ESG issues facing the country. To ensure the legitimacy of their companies, they should contribute to the eradication of unemployment, inequality, and poverty. On the other hand, the government's role is to create an enabling environment for the corporate sector to contribute accordingly (Haywood, Funke, Audouin, Musvoto & Nahman, 2019). According to Statistics South Africa (2021), unemployment in the first quarter of 2021 reached 34.4%. South Africa is the 12th largest carbon emitter in the entire world with per capita emission of 8.18 tonnes vis-à-vis a global average of 4.8 tonnes (Nteta & Mushonga, 2021). As a signatory of the 2015 Paris Agreement, companies operating in the country should contribute to the mitigation of climate change (Jegede & Makulana, 2019; Maggott, 2021).

As elsewhere in the world, directors of South African companies should be held accountable through compensation plans to contribute in resolving ESG issues. Their performance should not only be measured through the financial metrics but also on how their companies are faring on the management and reporting of ESG risks and considerations.

The use of multiple theories, namely agency, stakeholder and legitimacy, to frame and explain the phenomenon under investigation is consistent with the thesis of the study, namely integrating ESG when designing the directors' compensation plans. The social pillar in ESG represents the stakeholders beyond the shareholders. By considering the society they operate in, companies can legitimise themselves by consistently delivering what is expected of them, for example, minimising the negative impact of their activities on the environment and maximising positive impact. Companies can further be legitimised or obtain legal licences by producing accountable and transparent reports on their actions.

3. Environmental, social and governance (ESG) factors in directors' remuneration

Chakravarthy (1986) argues that measuring performance should go beyond financial measures that are narrowly focusing on shareholder value maximisation. Instead, performance measurement should incorporate elements that assess the success of maximising value for other stakeholders as well. In this regard, ESG has become one of the key performance metrics in recent years following the sustainable development goals (SDGs) and 2015 Paris Agreement (Folqué et al., 2021). This development is in addition to the conventional financial performance measures which are well embedded in organisational

performance measurement processes (Hübel & Scholz, 2020). The corporate sector therefore needs to demonstrate the extent of its contribution to the attainment of SDGs to which South Africa is also a signatory in terms of the 2015 Paris Agreement (Jegede & Makulana, 2019; Maggott, 2021).

ESG reporting has therefore been used as a proxy for non-financial performance measurement and how companies create value for stakeholders beyond those who provide financial capital (Bapuji et al., 2018; Widyawati, 2020). Trends indicate a paradigm shift in institutional investors whereby they are increasingly focusing on investee companies' performance with regard to climate risk, decarbonisation of their operations, and ESG in general (Bradford et al., 2017; Ibikunle & Steffen, 2017; Krueger et al., 2020).

Folqué et al. (2021) argues that companies are increasingly required to maximise and preserve value not only for the shareholders but for all the other stakeholders, including the employees, customers, suppliers, and society in general. It is in this context that there has been a proliferation of ESG rating agencies in recent years which use different methodologies to evaluate companies' performance based on largely voluntarily disclosed information in the annual reports (Gibson et al., 2021). Limited research has been conducted on the ESG and directors' compensation nexus. To this end, the extent to which the directors are held accountable to continuously improve ESG performance is not fully grasped. Lack of knowledge for directors' accountability towards ESG performance emanates from the fact that the directors' remuneration is driven by the conventional financial measures, such as earnings per share (EPS) and share price growth. In other words, for the executives to get more rewards, they are incentivised mostly to maximise profits and share price which mostly benefits them and the shareholders (Bouaziz, Salhi & Jarboui, 2020).

The Covid-19 pandemic has further shone a light on this shortcoming of how the directors are incentivised solely based on financial measures (Ding et al., 2021). Globally, many directors have awarded themselves new shares in the companies when the share prices were lower (Mazur, Dang & Vega, 2021). This was happening while most general workers lost their jobs and others were requested to take pay cuts (Butterick & Charlwood, 2021). Share prices have since been rising as different economies, thanks to government stimulus packages and consumers starting to spend from their savings that got accumulated during the lockdowns as well as increases in commodity prices (Mazur et al., 2021). When this happens, the directors are able to cash in enormous amounts from the share awards that were initiated during the lockdowns (Ding, Levine, Lin & Xie, 2021; Mazur et al., 2021; Sell, 2020). This is not sustainable and can only aggravate the high inequality that is already a problem in the South African context.

4. Evidence of the shortcomings in directors' remuneration literature

In spite of a general lack of understanding of the extent to which directors' remuneration is driven by ESG performance, the growing body of literature on directors' remuneration

focuses on investigating the relationship between directors' remuneration and companies' financial performance. Non-financial performance has largely not been considered in academic debates (Harjanti & Farhan, 2022). Furthermore, the results of the studies on the link between directors' remuneration and financial performance are inconclusive (Amewu & Alagidede, 2021). Some of the studies found that a positive relationship exists (Alves et al., 2016; Cordeiro et al., 2013; Scholtz & Smit, 2012), whereas others found that a negative relationship exists (Haynes et al., 2017; Khan & Vieito, 2013; Olaniyi et al., 2017;). Some found a weak relationship (Bebchuk et al., 2011; Jensen & Murphy, 2010) while some found no relationship at all (Al-Najjar, 2017; Cooper et al., 2016; Raithatha & Komera, 2016).

The concentration of the studies on developed economies is another shortcoming. South African studies on directors' remuneration such as Kirsten and du Toit (2018), Padia and Callaghan (2020) and Padia, Naik and Callaghan (2020) also neglected the non-financial performance measures and do not have conclusive findings. While studies such as Haque and Ntim (2020) and Chouaibi, Rossi and Zouari (2021) attempted to incorporate ESG, they were all conducted in developed countries in Europe, namely Austria, Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Norway, Spain, Sweden, Switzerland, and the UK. Furthermore, instead of investigating the compensation for all the executives, most of these studies investigated the chief executive officer (CEO)'s compensation citing the prominent role that the CEO plays in resource allocation and shareholders value creation (Bussin, 2015, 2018; Ngwenya, 2016; Theku, 2015).

The current studies therefore contribute to the directors' remuneration literature by incorporating the non-financial measures in the form of ESG rating. This is in addition to the existing financial performance measures such as return on equity (ROE), economic value added (EVA), market value added (MVA), Tobin's Q, and earnings per share (EPS).

5. Distinction between executive directors (EDs) and non-executive directors (NEDs)

In addition to the shortcomings highlighted above, directors' remuneration studies in the South African context such as De Wet (2012), Kirsten and Du Toit (2018), Lemma, Mlilo and Gwatidzo (2020), Padia and Callaghan (2020), and Padia, Naik and Callaghan (2020) have not attempted to specifically differentiate the executive directors (EDs) from the non-executive directors (NEDs) when empirically analysing the pay-performance relationship. While the rest of the authors did not even bring up the issue of splitting EDs and NEDs, Padia and Callaghan (2020) and Padia, Naik and Callaghan (2020) contend that a number of companies do not distinguish between dependent and independent non-executive directors, while Lemma et al. (2020) argue that the data available does not distinguish the remuneration paid to EDs and NEDs.

Distinguishing EDs and NEDs is pivotal because EDs are involved in the day-to-day operational management of the company while NEDs monitor and oversee EDs (Liew,

Ko, Song & Murthy, 2022). It therefore follows that the role of NEDs is part-time in nature with a less intense workload than EDs (Boivie, Bednar & Barker, 2015; García-Ramos & Díaz Díaz, 2020). NEDs do not only reconcile differences when there are disputes between EDs and other stakeholders, but they have the power to recruit and dismiss EDs (Bencomo, 2021; Janes & Harvey, 2022). Therefore, the authority that the NED have surpasses that of the ED (Budsaratragoon, Lhaopadchan & Thomsen, 2020). As a result, what drives the remuneration of these two groups is different. Hence, this study specifically split the remuneration between EDs and NEDs.

According to Bugeja, Fohn and Matolcsy (2016), NEDs' remuneration is mostly determined based on the function they perform, whether they are chairperson or a member of any committee delegated by the board, size of the company as well as the level of sophistication embedded in the company and sector (Belcredi & Bozzi, 2019; Bugeja et al., 2016). Conversely, Eds' remuneration considers the directors' characteristics such as level of education, tenure, experience, and their individual performance (Janes & Harvey, 2022). Consequently, NEDs are more concerned about their reputation than the financial rewards while EDs are concerned about financial rewards, hence the latter have been criticised for rent seeking (Bebchuk & Fried, 2003; Bugeja et al., 2016). NEDs are mostly paid fees for attending meetings while EDs' pay constitute salary plus performance-based incentives such as bonuses and share awards or share options (Bugeja et al., 2016; Liew et al., 2022).

In South Africa, share-based payments and awarding share options to NEDs are prohibited by King IV, which is mandatory for the Johannesburg Stock Exchange (JSE) listed companies (Institute of Directors South Africa, 2016). The rationale for this is that the majority of NEDs should be independent (Majoni, 2019). However, some companies still award shares and share options to NEDs (Andreas, Rapp & Wolff, 2012; Bugeja, Fohn & Matolcsy, 2016; Fedaseyeu, Linck & Wagner, 2018; Majoni, 2019; Seamer & Melia, 2015). This is arguably the reason why most companies have independent, grey, and non-independent NEDs (Belcredi & Bozzi, 2019). While this study clearly differentiates between NEDs' and EDs' remuneration, it does not further split NEDs' remuneration between these three categories.

6. Research methodology

6.1 Data and sample

The study covers the period 2015 to 2021 and is based on a sample selected from the top 100 companies listed on the JSE as indicated by market capitalisation. The year 2015 was selected as a starting point since that is when FTSE Russell started to conduct ESG rating for the JSE-listed companies. The year 2021 was selected as a cut-off date to ensure that the latest information is captured and analysed at the time of data collection. A combination of convenience and purposive sampling techniques was therefore used

in this study. From the top 100 JSE-listed companies, only companies that have been rated by FTSE Russell were included in the sample (69 in total). Therefore, for the period spanning 2015 until 2021, 483 (69 companies x 7) observations were made which gave effect to unbalanced panel data.

6.2 Variables

The following variables were collected for the purposes of the investigation in this study.

6.2.1 Dependent variable

- *Executive compensation (EC)*: This was obtained from the companies' archival integrated reports as published on their respective websites and it represents the total amounts payable to ED. It is made up of salary, benefits, short-term incentives, and long-term incentives.
- *Non-executive compensation (NEC)*: This was obtained from the companies' archival integrated reports as published on their respective websites, and it constitutes fees paid to NED.

6.2.2 Independent variables (financial performance measures)

All the financial performance measures used in the study where obtained from the IRESS database and are further divided into accounting-based and market-based measures in line with studies such as Amewu and Alagidede (2021) and De Wet (2012):

6.2.3 Accounting-based measures

- *Earnings per share (EPS)*: This variable represents the number of Rands (could be any other currency) earned during the period on behalf of each ordinary share issued (Almeida, 2019):
- *Return on Equity (ROE)*: ROE measures the return earned for the investment made by the ordinary shareholders in a company (Agrawal et al., 2019). It is profit attributable to ordinary shareholders divided by ordinary shareholders equity at the end of the year.

6.2.4 Market-based measures

- *Tobin's Q*: This measures what the market expects with regard to a company's performance for a specific period (2015-2021). Tobin's Q of 1 means the company's market value is equal to the cost. Tobin's Q of less than 1 means the company's share is undervalued while Tobin's Q of more than 1 means the company's share is overvalued (Al-ahdal et al., 2020; Rolle et al., 2020).
- *Economic value added (EVA)*: EVA is also known as a residual income. It represents the profit generated by the company after the cost of capital charge (Choong, 2021).
- *Market value added (MVA)*: This measures the difference between the economic/book value capital and the market value of the company (Agrawal et al., 2019).

6.2.5 Independent variables (non-financial performance measure)

- The only non-financial measure in this study is the company's ESG rating as obtained from FTSE Russell. FTSE Russell has been rating companies for over two decades in both the developed and developing economies based on ESG philosophy. However, the ratings for the JSE listed companies only started in 2015.

6.2.6 Alternative independent variables (non-financial performance measure) used for robustness check

- In addition to the ESG rating from FTSE Russell discussed above, another ESG rating was collected from Bloomberg Asset 4 to test whether the results still hold under an alternative ESG measure for the same period. This was used in model 2 of the study.

6.2.7 Control variables

- *Industry or sector (DM)*: Companies are classified into seven sectors. Dummy variable was created for the industry to control for sector differences. This is consistent with the literature that has indicated that the nature of the industry affects executive compensation (Hempel & Fay, 1994).

Some of the companies had missing data for one or more variables. In line with Flynn and Bordieri (2020), the imputation technique was used to deal with the missing data. Consistent with Tshipa, Brummer, Wolmarans and Du Toit (2018), box-plots were used to identify the outliers. For outliers that were identified in the dataset, the winsorization technique was used (Rossi & Harjoto, 2020; Uyar, Kuzey & Kilic, 2021).

7. Results and discussion

7.1 Descriptive statistics

Descriptive statistics were conducted first followed by diagnostic tests for multicollinearity, autocorrelation, and heteroskedasticity. The diagnostic tests were a precursor to the regression analysis that was conducted to determine the relationship between directors' remuneration and company performance (both financial and non-financial).

From the descriptive statistics presented in Table 1 below, it is worth noting that an average of R48 million and R10 million was earned by EDs and NEDs respectively over the period under review, while the average economic value added was negative R2.5 million. EVA represents profits minus capital charge over the period. Therefore, this implies that the profits generated by the companies over the period under review were not enough to cover the capital charge. This mismatch between pay and performance affirms the argument of this study and the fact that the directors' remuneration is not always commensurate with the underlying company performance while it is also more geared to growth in short-term profits.

Table 1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
NEC	478	R10m	R12.9m	R0	R174.2m
EC	478	R48m	R48.9m	R23.9m	R435m
ROE	475	18.76%	50.06%	-89.42%	72.67%
EPS	466	R11.38	R21.52	-R20.51	R300.42
Tobin's Q	458	1.47	1.14	0.06	8.71
EVA	468	-R2.5m	R21.7m	-R297.8m	R122.8m
MVA	456	2.2	1.92	0.34	13.07
ESG	441	3.3	0.89	0.00	5.00

Source: Own compilation from SPSS

7.2 Multicollinearity

To test for the presence of multicollinearity in the data, variance inflation factors (VIF) was computed for the predictor variables. The results are presented in Table 2 below.

Table 2: Variance inflation factors (VIF)

Variables	VIF
ROE	2.346
EPS	1.445
EVA	1.559
MVA	3.023
ESG	1.285
Tobin's Q	2.748

Source: Own compilation from SPSS

According to Al-ahdal et al. (2020), VIFs must be less than 10 to confirm the absence of multicollinearity in the dataset. Using this benchmark, it is clear that none of the predictor variables in this study indicated any sign of multicollinearity.

7.3 Autocorrelation and heteroskedasticity

Autocorrelation defines the extent to which the observations in the panel data are similar due to passage of time among them (Burlig et al., 2020; Naciti, 2019). The Durbin Watson test was used to determine whether autocorrelation was present in the data. A Durbin Watson test statistic between 1.5 and 2.5 range refutes the existence of autocorrelation, thereby indicating that there is no serious autocorrelation (Field, 2018; Levendis, 2018).

Panel least squares regression analysis was initially conducted as a starting point. To account for industry differences, seven dummy variables were constructed. In total, the sample is made up of seven industries and the study used six dummy variables since the seventh industry was used a reference variable. The resulting models for EDs' and

NEDs' remuneration have Durbin Watson values of 1.76 and 1.48 respectively. Because they both fall within an acceptable range of 1.5 to 2.5, there is no autocorrelation in the equations.

7.4 Estimated generalised least squares regression model

EGLS regression model was carried out to investigate the extent to which the executive compensation and the non-executive compensation are skewed and reliant on financial performance to the exclusion of ESG performance.

The following are the specifications of the two models:

$$NEC = \alpha_0 + \beta_1 \text{ROE} + \beta_2 \text{EVA} + \beta_3 \text{MVA} + \beta_4 \text{Tobin's Q} + \beta_5 \text{EPS} + \beta_6 \text{ESG-rating (FTSE Russell)} + \beta_7 \text{industry} + \varepsilon \quad \text{(Equation 1)}$$

$$EC = \alpha_0 + \beta_1 \text{ROE} + \beta_2 \text{EVA} + \beta_3 \text{MVA} + \beta_4 \text{Tobin's Q} + \beta_5 \text{EPS} + \beta_6 \text{ESG-rating (FTSE Russell)} + \beta_7 \text{industry} + \varepsilon \quad \text{(Equation 2)}$$

A robustness test was further carried out to establish whether the results would still hold if an alternative measure of ESG is used in the model. The following represent the equations to account for such a robustness test:

$$NEC = \alpha_0 + \beta_1 \text{ROE} + \beta_2 \text{EVA} + \beta_3 \text{MVA} + \beta_4 \text{Tobin's Q} + \beta_5 \text{EPS} + \beta_6 \text{ESG-rating (Bloomberg)} + \beta_7 \text{industry} + \varepsilon \quad \text{(Equation 3)}$$

$$EC = \alpha_0 + \beta_1 \text{ROE} + \beta_2 \text{EVA} + \beta_3 \text{MVA} + \beta_4 \text{Tobin's Q} + \beta_5 \text{EPS} + \beta_6 \text{ESG-rating (Bloomberg)} + \beta_7 \text{industry} + \varepsilon \quad \text{(Equation 4)}$$

Where NEC is NEDs' remuneration in equation 1 and EC is EDs' remuneration in equation 2, α_0 is intercept, β_1ROE refers to return on equity, β_2EVA indicates economic value added, β_3MVA represents market value added, β_4Tobin's Q is Tobin's Q ratio, β_5EPS is EPS, β_6ESG-rating represents the ESG ratings (from FTSE Russell in the base model and from Bloomberg in an alternative model used for robustness test), $\beta_7$industry is an industry dummy variable and ε represents error term. The results from the EGLS models are presented in Tables 3 and 4 below.

Based on Tables 3 and 4, the following is evident regarding the extent to which variations in NEDs' remuneration and EDs' remuneration are explained by the predictor variables.

All the independent variables that proxied financial performance, namely EPS, MVA, EVA, ROE, and Tobin's Q, are not statistically significant in explaining the variability of both NEDs' and EDs' remuneration. On the other hand, the ESG rating which proxied non-financial performance measures is statistically significant in explaining the variability in both NEDs' and EDs' remuneration on the base model. The ESG rating is more significant in explaining the variability of non-executive compensation on the base model. In both the NEDs' and EDs' remuneration, basic materials, healthcare, and consumer goods industries are also significant. For NEDs' remuneration, industrials and healthcare sectors are also significant as industry proxies.

Table 3: Panel estimated generalised least squares (period SUR) – non-executive compensation

		Variable	Base model			Alternative model (for robustness test)		
			Coefficient	t-value	p-value	Coefficient	t-value	p-value
Outcome variable	**Non-Executive Compensation (NEC)**	NEC (C)	10449.98	3.634858	0.0003	13448.06	3.854689	0.0001
Predictor variables	**Financial Performance Measures (FPM)**	EPS	0.092489	-0.226083	0.8213	0.177372	0.404398	0.6861
		MVA	-288.7946	-0.441150	0.6593	-762.5724	-1.325849	0.1857
		EVA	-8.59E-05	-1.388488	0.1658	4.24E-05	0.920038	0.3581
		ROE	8.331044	0.414733	0.6786	-17.86322	-1.066116	0.2870
		Tobin'sQ	-167.7156	-0.267706	0.7891	433.3908	0.906037	0.3655
	Non-Financial Performance Measures (NFPM)	ESG Rating	938.1499	2.184712	0.0295	33.62421	2.790724	0.0055
	Industry (dummy variables)	Basic materials	-7072.218	-2.591365	0.0099	-8150.221	-2.248828	0.0251
		Financials	-1871.496	-0.641103	0.5218	-2344.336	-0.649244	0.5166
		Industrials	-5002.769	-1.917958	0.0558	-6254.630	-1.774732	0.0767
		Healthcare	-6225.119	-2.522640	0.0120	-10300.76	-2.949782	0.0034
		Consumer Services	-3203.216	-1.359674	0.1747	-5869.893	-1.688638	0.0921
		Consumer Goods	-6415.928	-2.339056	0.0198	-7689.784	-2.318524	0.0209
R^2	0.063492					0.083977		
Adjusted R^2	0.035255					0.056358		
Durban Watson	1.460776					1.755945		
F-Statistic	2.248574					3.040561		

Source: Own compilation from EViews11

Table 4: Panel estimated generalised least squares (period SUR) – executive compensation

		Variable	Base model			Alternative model (for robustness test)		
			Coefficient	t-value	p-value	Coefficient	t-value	p-value
Outcome variable	Executive Compensation (EC)	EC (C)	51764.63	2.938937	0.0035	64118.80	4.177009	0.0000
Predictor variables	Financial Performance Measures (FPM)	EPS	2.894018	1.134089	0.2574	3.230499	1.223328	0.2219
		MVA	1636.398	0.707472	0.4797	1581.055	0.644745	0.5195
		EVA	-0.000442	-1.390357	0.1652	0.000229	0.753891	0.4514
		ROE	-23.16666	-0.209606	0.8341	-153.5989	-1.264682	0.2067
		Tobin's Q	1602.573	0.574851	0.5657	1907.627	0.686641	0.4927
	Non-Financial Performance Measures (NFPM)	ESG Rating	4156.865	1.903695	0.0577	79.01716	1.545095	0.1231
	Industry (dummy variables)	Basic materials	-43380.11	-2.662537	0.0081	-40991.62	-2.593730	0.0098
		Financials	-26011.37	-1.550887	0.1217	-25016.70	-1.528435	0.1272
		Industrials	-15833.23	-0.794723	0.4272	-20045.47	-1.091570	0.2757
		Healthcare	-48100.43	-2.882127	0.0042	-54651.53	-3.449764	0.0006
		Consumer Services	-25794.26	-1.449980	0.1479	-22507.64	-1.345623	0.1792
		Consumer Goods	-37149.58	-1.787510	0.0746	-38001.92	-1.900165	0.0581
R^2	0.041761					0.048443		
Adjusted R^2	0.012870					0.019753		
Durban Watson	1.784896					1.879469		
F-Statistic	1.445447					1.688492		

Source: Own compilation from EViews11

Based on the model for robustness test in which the ESG rating from Bloomberg was used, the results largely hold. This is apart from the executive compensation. In this regard, the ESG rating is not statistically significant in explaining the variability in executive compensation. The use of different rating agencies is common in the literature as confirmed by Billio, Costola, Hristova, Latino and Pelizzon (2021) who argued that the attributes, standards, and definitions of the three pillars of ESG are different among the rating agencies, including those used in this study, namely, FTSE Russell and Bloomberg. Nevertheless, the fact that the Bloomberg ESG rating is not statistically different in explaining the variability in executive compensation is an important finding since it affirms the fact that the executive compensation, most of which is bonuses and variable in nature, is not driven by non-financial performance. Rather, it is largely determined with reference to short-term financial performance measures which are subject to manipulation and accounting fraud as per the spectacle that played out in companies such as Steinhoff, Tongaat Hullet, Bain & Company, and many others (Davies, 2022; Rossouw & Styan, 2019; Van Vuuren, 2020).

The findings are consistent with those of Al-Najjar (2017); Cooper et al. (2016); Kirsten and Du Toit (2018), and Raithatha and Komera (2016) who all did not find any relationship between directors' remuneration and financial performance measures. The difference between the findings of this study and the other studies is that the current study also included an ESG rating, a proxy for non-financial performance as part of the independent variables. This shortcoming in the literature has also been lamented by Obermann and Velte (2018) who emphasised the importance of non-financial performance measures in designing compensation plans. Previous studies do not differentiate between the remuneration of EDs and NEDs (De Wet, 2012; Kirsten & Du Toit, 2018; Padia & Callaghan, 2020).

8. Conclusion and recommendations

The results of this study indicate that, when designing compensation plans of the executive and non-executive directors, companies are shifting away from focusing on financial performance measures to non-financial performance measures. The emphasis is no longer on financial performance measures. Padia and Callaghan (2020) argued that companies should integrate measures such as Tobin's Q and return on assets in directors' remuneration designs. The findings of this study therefore support the argument since the same measures were not found to be significant in explaining the variability in both executive and non-executive directors' remuneration. Furthermore, academics should investigate the specific non-financial or ESG indicators that can be used alongside the financial performance measures.

This study is not without its shortcomings. Chief among them is its delimitations. In particular, the study has not sought to investigate the remuneration policies of the sampled companies. To establish if there are any incentives provided to the executives with regards to ESG matters, future studies could specifically include content analysis of

companies' integrated reporting to interrogate the remuneration policies for the specific disclosure on ESG metrics for executive compensation. This can also help to provide more context of how the remuneration policies are geared towards fairness and equity while ensuring that the directors are responsibly remunerated amidst poverty, inequality, and unemployment challenges facing South Africa as a developing economy.

Incorporating the non-financial performance measures when designing compensation plans for both EDs and NEDs as suggested by the findings of this study is commendable. It is in line with the stakeholder theory which suggests that the interests of other stakeholders such as employees, customers, suppliers, and society in general should be considered in corporate decision-making (De Villiers & Marques, 2016; Freudenreich et al., 2020). Mio, Fasan, Marcon and Panfilo (2020) contend that companies are viewed in a positive light by society when they are cognisant of the pertinent issues affecting society and the environment in corporate decision-making. This is also consistent with the legitimacy theory that encourages companies to seek social license from society by being transparent and cognisant of societal factors in decision-making. In addition to the content analysis of remuneration policies discussed above, future studies could also investigate the specific non-financial performance or ESG indicators that are bespoke to the South African contextual setting and can be used in compensation design. Such an investigation would help the policymakers to have a baseline metric for compensation design.

Implications of this study is twofold. First, regulators should ensure that NEDs remain independent. The fact that ESG rating is significant in explaining variability in NEDs' compensation suggests that there could be a variable component and such a component is linked to ESG performance. Including variable components in NEDs' remuneration as suggested in this study is not consistent with the letter and the spirit of King IV code, which prohibits awards of share options and similar incentives to this group of directors. Therefore, policymakers should monitor this practice and ensure that NEDs are only paid fixed remuneration to ensure independence. Second, EDs' remuneration should not only be determined with reference to the non-financial performance measures as suggested in this study, but they should also couple that with financial performance measures that are aligned to shareholders' value maximisation ideals. This would ensure that the companies continue generating profits while not sacrificing their long-term sustainability.

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