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The influencing power of apply and explain on capital structure

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Abstract. The paper investigated the suspension of Independent Non-Executive Directors(INEDs) stock options on corporate capital choices: Equity, retained earnings, long term borrowing and short term borrowing. The paper used a sample of 1250 non-financial Firm years from 2010 to 2019. The Ordinary Least Squares and the difference in difference method discovered that the firms' Leverage increased positively after the reform. In particular, the suspension of stock options impacts the high levels of long term borrowing in the "Apply and Explain" periods. The study submits that the suspension of stock options maximizes the independence of the INED on the executive Board and Subcommittees (Audit and Remuneration) to reduce the use of retained earnings and promotes the use of Long term debts in financing projects.

Keywords. Capital structure, Independent Executive Director, stock options, Apply and Explain

1.Introduction

Corporate governance is a set of principles, rules, and laws that guide and direct corporate organizations' behavior, owners, and management in harmony with best practices, policies, and standards. Corporate governance sets the underpinning for a financially stable, robust and productive business status quo that reviews the interests of both inside and outside stakeholders (PeiZhi & Ramzan, 2020). Corporate governance has been an essential factor for circumspections amidst corporate sinking ships and the economic turmoil in the world. (Hassan Che Haat et al., 2008, Haldar, 2017). Stakeholders have bellowed for an efficient, accountable system that can direct, restrain and protect the requirements of the interested parties. Corporate governance acknowledges the stakeholder's fundamental requisites. After the acknowledgement, corporate governance seeks to implement strategies that contain advanced management activities toward shareholders' interests and incorporate other stakeholders' requirements. The notion of corporate governance requirements aroused with the separation of ownership and control in public companies, which emanates to agency problems in association to (Jensen & Meckling, 1976). (Fama, 1983) Later, the power and charge of presenting credible information and protecting shareholders' interests lie on the strength of the governance system(Calkoen, 2020). The information asymmetry between the two groups, management and

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shareholders, makes opportunism probable. The problem necessitates a guardian group; undoubtedly, the company board's importance becomes apparent.

Codes of best practices in the preliminary 1990s became the method originating in the United Kingdom, the United States and Canada. These countries have reformed their governance systems to become the world standards to safeguard the various stakeholders and their diverse interests(Calkoen, 2020; "Corporate Governance," 2021). In 1994, South Africa published its first code (King I). In 2002, after the Earth Summit, an amendment (King II) included sections on sustainability, risk management, and the board's functions. In response to the 2008 global economic debacle, King III was birthed in 2010 to find an antidote to corporate failures. These prescribe corporate organizations to produce integrated reports to envelop the annual financial statements and other non-financial reports. Companies were also to report on sustainability ensuing the global reporting initiative sustainability reporting guidelines. Based on a desire to make continuous progress, in November 2016, the fourth revision (King IV) was issued about governance and leadership as exigent features to the success of businesses. These reforms may have an impact on corporate capital structure.(Armstrong, 1995; Vijayakumaran & Vijayakumaran, 2019)

The element of capital leveraging in firms is an onerous decision that is impossible to disregard by the Board of directors(Huang & Shang, 2019). Capital structure is thus one of the significant tasks for the board of directors. Capital structure, an indispensable ingredient in all business, also affects all operating levels. The study focuses on how board independence reforms impact capital structure.(Alves & Ferreira, 2011; Kalantonis et al., 2021)

If contemplated and managed effectively, this pivotal domain in the Corporate Finance and Accounting study will sustain businesses' going concern, especially in Sub Saharan Africa. (Abor & Biekpe, 2007; Huang & Shang, 2019) The drive to consider corporate governance reforms and capital structure management will diminish the cost of capital and maximize shareholder returns. (Danso et al., 2019). Corporate governance, specifically through the management of the organization systems, narrows the agency problems and maximizes shareholders wealth (Uwuigbe, 2014). Therefore the corollary of corporate governance on the capital structure cannot be ignored as it is fundamental in corporate financing decisions. The resultant consequences are that corporate organizations will achieve their valued objectives, protect shareholders rights and meet disclosure and legal compliance through a robust corporate governance system.

The reforms in King IV project the Independent Non-Executive Directors (INEDs) as an improved system and impartial approach to the agency problem(Rajoo, 2020). Other studies(Haldar, 2017) favor INEDs as a preferred choice for monitoring management and allaying the conflicts between the management and shareholders. It proposes for the majority of INED to be on boards to facilitate the work of the Board. King IV further suspends the INED from taking stock options to make them more independent. This is to ensure that opportunistic behavior is reduced to the barest minimum (Feng, 2020). Moreover, it helps the financing decisions by craving a particular skill in the strategic decision process (incentive to firm-specific investments) and limits complications of information asymmetry.

The question for research is to what extent these reforms impact reducing the Firm's cost of equity? Several studies have probed into the determining aspects of capital structure and the theories thereof. Also, most of the studies into corporate governance mainly links with the effects of the corporate governances' practices on the value of a firm. In contrast, other research works investigate firm Leverage and its impact on financing decisions. Moreover, capital structure studies are strenuous on developed countries, putting less priority on the developing countries.

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Additionally, it is imperative to investigate the issue of a reform where the incentive of the independent director as recommended by the Kings code excludes share options. Therefore, this paper seeks to investigate and contribute to prior works by examining an emerging country South Africa, where there are reforms to have the majority of the members of the Board as independent whiles recommending a halt in the participation of the INED in the share options of the firms. Subsequently, the paper intends to add to the existing literature by finding whether the Board of directors' independence level and that of the sub-boards affect the financing decisions of listed firms on the Johannesburg Stock Market (JSE) from 2010 to 2019.

This research is modelled and built on the Pecking order. It investigates the effects of board independence and the independence of financial sub-committees (Audit and Remuneration) on the financing streams used by firms. We ascertained that a more independent Board and subcommittee might reduce the information hiatus. This will empower stakeholders and reduce adverse selection expenditures considered by the Pecking Theory. To test this assertion, the study considers the firm's board and financial subcommittees independence on its financing streams. Does the reform have an influence on the structure of the financing streams on the JSE?

The study seeks the relationship between board independence and firm capital structure. Furthermore, the study breaks the streams of financing into external and internal streams. Subsequently, the inquiries will differentiate the retained earnings from external equity. Internal streams will be analyzed by long term and short-term debt capital since the pecking order forecasts a rank in firm finances. The paper is also unique in studying the independent directors on the Board and extending to the independent directors on the audit and remuneration committee.

After controlling for different control variables, the outcome of our empirical research supports the proposed hypothesis. The Ordinary Least Square proves proportion of the independent directors on the board are positively related to the ratio of the overall leverage of the firms. External financing outweighs debt financing. Retained earnings have a negative association with regards to the increase of the board independence. The difference in difference method confirms a significant negative effect on retained earnings after INEDs stopped taking stock options in the "Apply and Explain" years.

The paper is structured as follows. The literature on capital structure and the literature concerning board composition reforms on capital structure is reviewed and set out as the main hypothesis in the subsequent chapter. In the third chapter, the methods and data are presented. The study shows the results of the research and discussions in chapter four. The chapter concludes with implications of the findings.

2.Literature Review and hypothesis development

Two primary schools of thought are based on the capital structure, thus Tradeoff theory and the Pecking order theory. These two theories can envisage management financial decision behaviors differently, even though they are not clashing. The two proponents are summarized in this study to form the basis of our hypothesis's development.

The Tradeoff theory: The theory conjecture for management to choose an ideal mixture of equity and debt. Debt acquisition has the expediency of tax payments of interest to debtholders. Interest payments are susceptible to tax deduction; therefore, management is induced to choose debt (Izhakian et al., 2021). Nevertheless, debt comes with costs broadly ascribed as costs of bankruptcy and agency financial distress costs.

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The direct costs linked with bankruptcy costs are legal and administrative expenses. The reduction in the assets of a firm employing the bankruptcy procedure is also rated as indirect costs. These include losing business clientele. Moreover, the costs that emerge from the conflicting interest between the debt and equity holders may also be considered. Management tries to transfer the riskiness of their investments after issuing obligations. Studies verify the fact that equity value appreciates as the risk of the underlying assets increases. This motivation can be viewed as a call option. Management substituting for debtholders are likely to switch the cost to creditors' operations. Management conduct in this sense is termed "the asset substitution problem" in controlling this behaviour of management. (Yusuf & Sulung, 2019). Debtholders produce debt contract documents that avert and monitor management in engaging in more financial distress. The tradeoff contends management will target the leverage level, which can maximize the Firm's value.

2.1The Pecking order theory

The theory postulate that the cost of financing increases with asymmetric information. Management will prefer to internally finance the Firm through the retained earnings stream. If this funding stream is unavailable, management will ultimately seek to finance its activities through debt as management will fall on using the issuance of equity as a final resort to financing itself. The compelling argument raised here is investors are often skeptical in investing in firms issuing shares. They offer to buy it at a lower price leading to the reduction of the firm's value. (Alves & Ferreira, 2011; Kalyanaraman & Altuwaijri, 2016). This happens because new equity requires the transfer of value from current shareholders to new shareholders, where managers pass up an investment opportunity to increase the Firm's value.

In this scenario, the internal agent, thus, management, has more knowledge than the outsider stakeholder—internal financing sources aid management in proceeding with the project and new opportunities. Additionally, if the cost of debt is accessible and risk-free, it can be considered. If the debt is accessible but risky, management needs to compare it with issuing shares to choose the lower cost. Therefore, management in deciding to finance a project will choose to retain earnings over debt; secondly, they may consider debt before considering equity(Jensen & Meckling, 1976; Rahman & Mahenthiran, 2008).

The variance between the tradeoff and the pecking order is mainly in the tradeoff; the ratio of equity and debt to finance a project are targeted as one objective, while in the pecking order, credit is given to the lower risky financing stream(Culata & Gunarsih, 2012). Practically, management combines the two to provide the firm with tremendous leverage to maximize the shareholders' worth.

2.1.1Hypotheses

According to the pecking order theory, it is clear that there are information disproportionateness hitches among management and capital providers(Kalantonis et al., 2021). This is an essential element of financing decisions in a firm. Several capital providers have different access to information and different approaches to monitor firm behaviour. The independence of the Board will help to reduce this difficulty. It is assumed that independent board members will make the decisions transparent to capital providers as recommended by the King codes. Therefore, if information sharing difficulties reduce management may seek to use other options other than retained earnings.

Empirically, studies have confirmed better corporate governance practices such as board independence with firms may produce better information disclosures and reduce information asymmetry. (Zaid et al., 2020; Tosun & Senbet, 2020; Yusuf & Sulung, 2019)

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H1. There is a positive relationship between independent directors on a board and the proportion of risky securities on its capital structure

H1a. There is a positive relationship between independent directors on the audit committee board and the proportion of risky securities on its capital structure

H1b. There is a positive relationship independent directors on the remuneration committee and the proportion of risky securities on its capital structure.

3. Methodology and Data Collection

The paper is built on a sample extracted from the Johannesburg Stock market Annual financial reports and integrated reports from the individual company websites. The study obtained sections of the corporate governance variables for the Board from the Bloomberg database. The preliminary sample consists of financial and non-financial firms on the JSE from 2010 to 2019. The study has chosen the time frame because the year 2010 was the genesis of King III recommending for the majority of Independent Non-Executive Directors (INED). 2019 was also selected as the period end because it is the last firm-year (Apply and Explain) of the momentous pandemic in 2020. King III was revised in 2017 from Apply or Explain to the "Apply and Explain" principle. Most firms could not report early as usual. Selecting a longer time frame will have also reduced the sample size of the original sample. The next is the exclusion of financial firms due to the specific regulations and the unique industry, such as the capital requirements, risk, and economic settings that can influence the financing choices and the study results. The firms which were delisted and having missing values for more than five years were excluded. The initial sample is composed of 1,250 firm-year observations.

The ordinary least square is used for analyzing the trends in the whole sample. The difference in difference method by Kim et al. (2012); Tosun & Senbet (2020) is used as a robust check to assess the post effects of the principle "Apply and Explain" in 2017.

3.1Measurement of the Variables

3.1.1Dependent Variable:

Capital structure is the dependent variable. The standard measurement of Leverage is by the percentage of the book value of total debt divided by the book value of debt plus the market value of equity. (PeiZhi & Ramzan, 2020). We further hypothesize that the firms are composed of diverse financial streams. The Board might be interested in either external sources or internal sources of financing. The study, therefore, partitioned the financing streams into four echelons according to the Pecking theory order. First, the study categories equity into two, either internal source or external source—one favored according to pecking order and the other at the lowest.

$$Capital\ structure1 = \frac{Total\ Equity\ (Book\ Value)}{Total\ debt + Total\ equity(Book\ Value)} \quad \text{equation 1}$$

$$Capital\ structure(CS) = \frac{Total\ debt\ (Book\ Value)}{Total\ debt + Total\ equity(Book\ Value)} \quad \text{equation 2}$$

Similarly, the study follows the work of (Baker & Wurgler, 2002) and refer to the internal source of equity as retained earnings (RE) and External Equity (EE) as the book value of equity minus retained earnings. Lastly, we group the firm debt into long term debts (LD) and short-term debts (SD). The study interprets the LD as the total book value of non-current liabilities (liabilities to be paid after one financial year); SD is defined as current liabilities due to less the accounts payable of a firm. We scale each of the financing types by the total book

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value of capital employed. According to (Rajan & Zingales, 1995), the book value of assets minus accounts payables.

$$Capital\ structure3 = \frac{Total\ Equity - Retained\ Earnings}{Total\ debt + Total\ equity(Book\ Value)} \quad \text{equation 3}$$

$$Capital\ structure4 = \frac{Retained\ Earnings}{Total\ debt + Total\ equity(Book\ Value)} \quad \text{equation 4}$$

$$Capital\ structure5 = \frac{long\ term\ debts}{Total\ debt + Total\ equity(Book\ Value)} \quad \text{equation 5}$$

$$Capital\ structure6 = \frac{Short\ term\ debt}{Total\ debt + Total\ equity(Book\ Value)} \quad \text{equation 6}$$

3.1.2 Independent Variables

Independence of the Board is measured as a percentage of places held by directors who are not associated with the Firm's business or represent a group of shareholders(Morellec et al., 2012); the study considers independent directors on the Audit Committee and Remuneration committees as well. These committees are chosen because Independent directors on these committees are directly involved in the financial systems of the firms.

3.1.3 Control Variables

Board Size equals the number of directors on a firm's Board (Amran et al., 2010); we calculate the board size by counting the individual number of directors serving on the Board in a particular financial year. Diversity of the Board is measured by the number of women represented on the Board as directors. The percentage of the Audit Committee Independence directors is measured by the number of independent directors on the audit committee. The CEO tenure is counted as the number of years the CEO has been on the seat.

The following variables are incorporated into analysis for further study as they are known to affect a firm's capital structure. The natural log of total assets measured firm size. The study chose it because studies by (Kalyanaraman & Altuwaijri, 2016) found the size positively related to the capital structure (Zaid et al., 2020; Tarus & Ayabei, 2016) found the size to be negatively associated with a firm's capital structure. Firms with relatively large amounts of assets may pay secured debts due to the available nature of tangible assets. They may also employ better management who are well informed and can strategize for better economies of scale and capture a large market. Their large firms have a lower risk of bankruptcy and are more transparent in financial reporting. Again, transparent financial reporting will reduce agency problems related to lower cost of debts monitoring and higher Leverage.

The following control variable is the firm age computed by the Firm's natural log in operation. Older firms may have an advantage over younger firms since they may have a good history level to back their demands. Young firms may need to develop good credit ratings over several years to assess them to receive debt. In simplest terms, young firms may have fewer debts than older firms

Firm growth is used as a control because of the asset substitution problem (Jensen & Meckling, 1976). Firms with higher chances to grow are more likely to shift the risk of their assets and shareholders benefits to debt holders. Similarly, firms with relatively new investment opportunities may value the investment and pass it to bondholders at a reduced risk price. The assets substitution can affect the capital restructure of a firm, especially firms with higher

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opportunities to grow. (Alves & Ferreira, 2011) Firm growth is calculated by the average growth rate of a firm's sales (sales growth) following the study of (Mande et al., 2012)

Again, the return on assets, also known as operating profitability, is calculated by the proportion of earnings before taxes, interest, depreciation, and amortization to the book value of a firm's total assets. This is included as a control variable. Firms with high levels of profitability may prefer to choose internally generated funds to finance their investments despite the problems of limited information. We measure this by using the standard deviation of firms operating profit over a period of time. (sigma ROA)

Agency costs as a control variable were also used as agency theory argues that more debt capital reduces agency problems (Jensen & Meckling, 1976). Agency cost was proxied by the asset's utilization ratio. The asset utilization ratio is defined as the sales by the total assets of a firm. This was considered because it measures how efficiently managers use assets. (Singh and Davidson 2003) a high ratio means management is using assets to gain more sales volumes. The higher the ratio is an indication of efficient board management practices. Thus, firms with lower ratios have more serious agency problems and are related to lower assets turnover.

3.3Model Specification

The study follows the research modelling in a study by (Wen et al., 2002) with some modifications to estimate the effect of the non-payment of share options for independent directors in South Africa. The study, therefore, using a panel data approach and an Ordinary Least square model will be suitable to execute. The general model is as follows

$$Capital\ Structure_{it} = \beta 0_{it} + \beta 1 BI_{it} + \beta 2 \sum controls_{it} + \varepsilon_{it}$$

Where capital structure, the dependent variable for the firm 'i' and time "t". Capital structure is divided into equity, retained earnings, long term debt, short term debt and CS, the total amount.

β_0 is the constant variable in the equation.

β_1 will be the corporate governance items reformed.

β_2 is the sum of all the control variables as explained above.

ε is the error term in the equation.

The study applied the difference in difference method to ascertain the results of the impact of the reform. The model is given below:

$$Capital\ structure_{it} = \beta 0_{it} + \beta 1 BI_{it} + \beta 2 Post_{it} + \beta 3 BI.Post_{it} + \beta 4 \sum controls_{it} + \varepsilon_{it}$$

Where Post are firm years after 2017 when King III was amended to (King IV) Apply and Explain the principles in the code

All the other variables have the same explanation above.

Table 1: Measurement of Variables

Variables	Acronym	Measurement
Dependent Variables		
Capital Structure	CS	Debt divided by Total equity plus Total debt(Book Value)
External Equity	EQUITY	Book value minus retained earnings
Retained Earnings	RETAINED	Retained earnings divided by Total equity plus Total debt(Book Value)
Long Term Debts	LONGTERMD	Long term debts divided by capital employed
Short Term Debts	SHORTTERMD	Short term debts divided by capital employed
Independent		
Board independence	BI	The number of independent directors on the Board

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Audit board independence	AUDINED	The number of independent directors on the Audit committee
Remuneration board independence	REMINED	The number of independent directors on the Board committee
Stock options Reform	STOCKop	1 for firms that suspended stock option, 0 otherwise
Controls		
Return on Assets	ROA	Net profit divided by total assets
Sigma Return on Assets	sdROA	The standard deviation of firms operating profit over a period of time
Liquidity	Liquidity	Current assets divided by current liabilities
Firm Age	Lnfage	Log of Firm's age
Firm Size	Lnfsize	Log of Firm's total assets
Sales Growth	SGrowth	The average growth rate of the Firm's operating revenues during the sample year
CEO Tenure	Tenure	Number of years CEO has held that position
Directorship	directorship	The average number of outside directorship held by the Board members
Board Diversity	Diversity	The ratio of independent female directors
Board Size	BODSize	The number of directors for a firm-year
Agency Costs	AgencyCost	Proxied by assets utilization ratio; sales divided by total assets
Post	Post	The year 2017 and years beyond

Table 1: Operationalization of independent, dependent and control variables used in the study and their respective acronyms.

4.Results, Discussions and Conclusions

4.1Results and Discussions

Table 2: Descriptive Analysis

VARIABLES	OBS	MEAN	STD DEV	MIN	MAX
CS	1,250	44.78	18.95	0.52	99.67
EQUITY	1,250	0.51	2.09	-1.15	34.08
RETAINED	1,250	0.09	2.14	-33.34	5.36
LONGTERM	1,250	0.21	0.73	-9.95	21.81
SHORT-TERM	1,250	0.19	0.23	-4.43	3.70
INED	1,240	5.89	0.73	3.64	9.66
AUDINED	1,231	5.58	0.68	3.45	8.68
REMINED	1,223	5.57	0.70	3.53	8.91

Table 2: Presents the statistical description of the independent and dependent variables for the study.

Table 2 presents descriptive statistics on the variables used in the study. The study used a total of 1250 firm years for the analysis. The study's mean total capital structure for the sample was 45%. The maximum amount of external equity, retained earnings, and long-term and short-term variables are 34%, 5%, 21% and 4m%, respectively. The averages are as follows

The leading independent variables observed are independent board directors, independent directors on the audit committee and the independent directors on the remuneration committee. The average number of independent directors on the Board and the Audit and Remuneration committees was five members.

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Table 3: Pearson correlation

	CS	EQUITY	RETAINED	LONGTERMD	SHORTTERMD	INED	AUDINED	REMINED
CS	1.000							
EQUITY	-0.098	1.000						
RETAINED	0.006	-0.263	1.000					
LONGTERMD	0.149	-0.051	-0.212	1.000				
SHORTTERMD	0.349	0.026	0.112	-0.741	1.000			
INED	-0.069	0.155	-0.141	-0.064	0.101	1.000		
AUDINED	-0.125	0.145	-0.124	-0.071	0.061	0.214	1.000	
REMINED	-0.063	0.138	-0.123	-0.062	0.086	0.199	0.112	1.000

Table 3: presents the association between the independent and the dependant variables. The results show a weak association which means there is a lesser chance of multicollinearity among the variables.

Table 3 discusses the Pearson correlation. The Pearson correlation firstly examines the effect of multicollinearity and the variable association strengths. The leverages and the Board and sub-board committees indicate the results are less than 0.5, which is not a strong correlation. The Pearson correlation shows there is no multicollinearity among the variables.

Table 4: Regression Analysis

VARIABLES	(1) CS	(2) EQUITY	(3) RETAINED	(4) LONGTERMD	(5) SHORTTERMD
INED	1.401*	0.326**	-0.350**	0.00268	0.0214
	(1.312)	(0.150)	(0.154)	(0.0504)	(0.0158)
AUDINED	-9.816***	0.114	-0.000109	-0.0567*	-0.0568**
	(2.042)	(0.233)	(0.240)	(0.0785)	(0.0246)
REMINED	5.451***	0.0957	-0.140	-0.00501	0.0496**
	(1.923)	(0.219)	(0.226)	(0.0739)	(0.0231)
ROA	0.00199	6.80e-05	-9.47e-05	1.95e-05	7.20e-06
	(0.00292)	(0.000333)	(0.000342)	(0.000112)	(3.51e-05)
SdROA	0.00682**	-0.000347	0.000296	0.000109	-5.67e-05
	(0.00327)	(0.000373)	(0.000383)	(0.000126)	(3.93e-05)
liquidity	3.282***	-0.211	-0.120	0.524***	-0.192***
	(1.160)	(0.132)	(0.136)	(0.0446)	(0.0140)
lnfirmage	3.076**	-0.191	0.0745	0.108*	0.00886
	(1.470)	(0.168)	(0.172)	(0.0565)	(0.0177)
lnfirmsize	-2.153***	-0.0624	-0.102**	0.0540***	0.0148***
	(0.436)	(0.0498)	(0.0511)	(0.0168)	(0.00524)
SalesGrowth	0.00312	0.00205*	-0.00231*	0.000183	8.08e-05
	(0.0102)	(0.00116)	(0.00119)	(0.000391)	(0.000123)
CEOtenure	0.0693	0.00235	-0.00643	0.00576*	-0.00168*
	(0.0783)	(0.00894)	(0.00918)	(0.00301)	(0.000942)
directorship	-0.0139	0.0536	-0.0552	-0.00451	0.00610
	(0.338)	(0.0385)	(0.0396)	(0.0130)	(0.00406)
Diversity	0.236***	-0.0131*	0.0110	0.00116	0.000941
	(0.0647)	(0.00739)	(0.00759)	(0.00249)	(0.000779)
BODsize	0.428**	-0.000980	-0.00869	0.00725	0.00242
	(0.200)	(0.0229)	(0.0235)	(0.00770)	(0.00241)
Agencycost	-0.0115***	-0.000214	0.000388	-0.000103	-7.13e-05**
	(0.00270)	(0.000309)	(0.000317)	(0.000104)	(3.25e-05)

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Constant	66.40***	-1.803***	2.215***	0.606***	-0.0182
	(5.645)	(0.644)	(0.662)	(0.217)	(0.0679)
Observations	1,222	1,222	1,222	1,222	1,222
R-squared	0.097	0.039	0.031	0.116	0.163

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Model (1) shows the regression results of Board and subcommittee independence's relationship with total capital structure changes. Model (2), (3), (4) and (5) shows the impact of Board and subcommittee independence on equity, retained earnings, long term debts and short terms debts, respectively.
Notes: $Capital\ Structure_{it} = \beta 0_{it} + \beta 1 BI_{it} + \beta 2 \sum controls_{it} + \varepsilon_{it}$

Table 4 shows the results exhibiting linear regression analysis. The results show that the higher the number of independent directors, the lower (-0.350) the retained earnings at p<0.05 significant levels used for financing the Firm's projects. The results from the Audit and Remuneration subcommittees confirm retained earnings will have a negative effect but are not significant.

Larger firms show a negative significance on the overall Leverage of the Firm. The effects of increased INED on retained earnings have been negative(-0.102) at a significant level at p<0.05. External equity is at (-0.062) but not significant. The long term debts and short term debts have positive effects at P<0.01. The results mean large firms may have the privilege of contracting debts since they have considerable assets as collateral. The large firms may consider long term debts (0.054) before considering short term debts(0.014). after considering debts, management will consider equity as the subsequent stream of finances for the Firm.

The Board size is likely to affect the overall Leverage positively but not significant on individual variables of capital structure. Diversity in the Board room is also expected to have a positive effect on the overall capital structure. It significantly affects the external equity negatively (-0.013 at p<0.1)

The tenure of the CEO has significant positive effects on long term debt and a significant negative impact on short term debts. Directorship is having no significant impact on the Leverage of the firms.

Table 5: Difference in Difference method

	(1) CS	(2) EQUITY	(3) RETAINED	(4) LONGTERMD	(5) SHORTTERMD
POST	-7.040* (-2.03)	0.309 (0.80)	-0.0159 (-0.04)	-0.377** (-2.84)	0.0838 (1.95)
STOCKop	2.003 (1.41)	-0.155 (-0.99)	0.150 (0.94)	0.00446 (0.08)	0.000629 (0.04)
STOCKopXPOST	8.744* (2.37)	-0.103 (-0.25)	-0.193 (-0.46)	0.344* (2.44)	-0.0484 (-1.06)
CONSTANT	43.81*** (49.43)	0.463*** (4.73)	0.127 (1.27)	0.232*** (6.83)	0.178*** (16.30)
N R-SQUARED	1250 0.005	1250 0.005	1250 0.004	1250 0.007	1250 0.008

T statistics in parentheses *p<0.05, **p<0.001,***p<0.001
Table 5: Model (1) presents the post-regulation effects of the suspension of the Stock option on capital structure. Model (2), Model (3), Model (4) and Model (5) reveals the impact on various categories of Capital structure; thus, Equity, Retained earnings, Long-term debts and Short term debts, respectively.
Notes: $Capital\ structure_{it} = \beta 0_{it} + \beta 1 BI_{it} + \beta 2 Post_{it} + \beta 3 BI.Post_{it} + \beta 4 \sum controls_{it} + \varepsilon_{it}$

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The study uses the difference in difference method to analyze the effect of the Independent Directors(INED) stock options' suspension on the choice of the financial stream for the firms. A dummy variable(=< 2017) for the post periods is used for the years which applied the 'Apply and Explain' principle. The interaction of the post periods variable and the treatment firms on the Johannesburg Stock Exchange shows a positive (0.344) significant effect on Long term debt. Equity and retained earnings are having negative (-0.103, -0.193) effects confirming our hypothesis. The more the independence of the Board is enhanced, the Board makes better decisions in the choice of funding projects. Moving from the 'Apply or Explain' to 'Apply and Explain' seals the gap for firms not to comply with the principle. The sample shows an increase in complying with the reform to suspend the stock option for the INED.

4.1.1Conclusion

There are many reforms and measurements to shape the corporate governance of the Johannesburg Stock Exchange(JSE). Previous literature has examined the independence in terms of the Board only. Again, the prior literature focused on the period before and after King III, not emphasizing King IV. The study bridges the gap by taking a different approach to investigating the effects of independence reforms on firms' capital structure listed on the JSE. South Africa has similar regulations like many common law countries but has slightly different reforms by adopting the 'Apply and explain' rule. The reforms also include the majority of the board directors being independent, and their disclosure should be in the integrated financial reports. Finally, to improve upon independence, the reform exempted the independent non-executive directors (INED) from stock options. Independence strengthens the Board in terms of reviewing management decisions. Corporate Board increases the monitoring role on management to oversee the usefulness of corporate governance mechanisms.

Based on the pecking order theory and the tradeoff theory, this study reveals that management may go for available debts at a lesser price before considering retained earnings and external equity. Therefore, the rate of Information asymmetry is dropped to acquaint the INED directors of the strategies behind choosing a project financing. The reforms enhance Communication between the shareholders and directors. The shareholders receive more and accurate information for stakeholders to make informed investments in the Firm. The study investigated how the agency costs between management and shareholders will be minimized to choose financing streams to get the maximum benefits.

The study found overall board independence has a significant effect on the overall Leverage of the Firm, especially on the retained earnings. The Audit and Remuneration committees have a negative influence on the retained earning but is not significant. The Board size has significant impacts on all capital structure variables against external equity. Yusuf & Sulung (2019) agree that the larger the board size, the less equity and retained earnings. The age of the Firm has implications on long term debt. Women on the Board also have a substantial impact and increase the Firm's external equity. "We find that both firm leverage and short-term debt ratios are negatively associated with social capital (i.e., the altruistic tendency and mutual trust among people within a community). This relation is more pronounced in cases where information asymmetry problems are more severe. It is robust to using alternative measures of critical variables, addressing endogeneity issues, employing alternative model specifications, and simultaneously estimating Leverage and short-term debt. An analysis of debt structure (bank loans vs public debt) shows consistent results. Our findings are in line with the idea that social capital lowers the need for corporate borrowing mechanisms as a means to alleviate agency problems for firms. (Huang & Shang, 2019; Cole David Corey, 2019). Female diversity shows that females are risk-averse and go in for cheaper finance streams. The CEO tenure has

long term and short term debts. The number of directorship positions in other firms does not necessarily influence the capital structure. The study interacted the post-reform years with firms that exempted the INED from stock options, and the results obtained was robust to the earlier results. There was an increase in long-term debts, which substantially influenced the firms' capital structure.

Overall, the research submits the importance of Board independence on capital funding decisions. The reforms in the corporate governance codes in South Africa, even though they follow western regulations mostly, are unique to the country's situation. The study is timely as it studies the role of the Board and two subcommittees who are directly involved in the Firm's finances. The study recommends a further enquiry on the skills of the independent directors on the Audit and Remuneration

The paper is inherent the following limitations. The sample, the variables, the period makes generalization of the findings difficult. Nevertheless, other studies can investigate more governance variables, including the diversified skills held by the independent directors on the subcommittee, the impact of ownership on capital structure, and including Non-listed firms that King IV covers.

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