

Agency Costs and the Power of “Apply and Explain” from South Africa

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Abstract

This paper examines whether corporate governance mechanisms and the presence of institutional investors in South African publicly listed firms impact agency costs. Our findings show that large board size has harmful effects on agency costs; board independence allays agency costs. It is vital to distinguish institutional investors by investment objective and their monitoring ability to reduce agency costs. Results show that while institutional investors have taken as a homogenous group appeared to play an important governance role in allaying agency problems, pressure-insensitive investors can exert more influence in agency-related issues. Results have policy implications on the monitoring abilities of Independent Non-Executive Directors and institutional investors in South Africa.

Keywords

Agency Costs, Board Characteristics, Institutional Investors, Apply and Explain

1. Introduction

Agency interactions inside the firm and the costs associated with them have been widely researched in the corporate finance literature since Jensen & Meckling (1976). Corporate governance research assumes internal and external corporate governance devices reduce the levels of agency cost and impact firm value. A vast deal of empirical evidence indicates that agency conflicts and the magnitude of agency cost significantly impact financial decisions and investment decisions (Abor & Biekpe, 2006; Chaudhary, 2021; Huu Nguyen et al., 2020; Porta et al., 2000). There is no consensus on the role of corporate governance mechanisms in mitigating these problems and their associated costs.

Additionally, existing studies (Callen & Fang, 2013; Harber, 2017; Muniandy

et al., 2016) provide limited support on institutional investors' impact on agency costs, especially in Sub-Saharan Africa. Much of the prior research on the ownership-performance link assumes that institutional investors can align with the interests of managers and shareholders. Hence, institutional shareholdings are likely to have a favourable impact on business performance. The beneficial effect is attributed to a reduction in the estimated expenses of the agency conflict between management (Huu Nguyen et al., 2020; Porta et al., 2000).

Muniandy et al. (2016) suggested research on institutional investors as a single homogenous group can lead to biased outcomes. To better understand their influence in the firm decision making, these investors should be divided into separate groups. Despite the many valuable perceptions provided by this body of work, only a few studies directly address the measurement issue of the primary variable of interest, namely agency costs. Noteworthy exceptions are (Ang et al., 2000; Porta et al., 2000; Singh & Davidson III, 2003). Their study focuses on two proxies: total sales to total assets ratio (assets turnover and discretionary expenses to total sales (expenses ratio) for agency costs. They give evidence that management ownership aligns the interests of managers and shareholders, reducing agency costs in line with prior research findings.

The purpose of this paper is to extend the investigations of these studies by analyzing the determinants of agency costs in South Africa empirically for the listed firms on the Johannesburg Stock Exchange (JSE). Following the works of Ang et al. (2000), Chaudhary (2021), Singh & Davidson III (2003), we model both proxies of agency costs: assets turnover and expenses ratio. More specifically, we empirically investigate the effect of board size, board independence, board directorship, board diversity and institutional investors on the agency costs likely to arise between the shareholders and the managers. Consequently, we classify institutional investors into two categories. We divide the institutional investors into groups based on their potential commercial relationships with the investment firm. The research purports to gather fresh evidence from South Africa, a Sub-Saharan Africa country where corporate governance codes were published first in 1994. In 2010 the third reform (King III) recommended changes to the board by including the majority of Independent Non-Executive Directors (INED) on the firms' board of directors. It also suggests the suspension of the stock options compensation for the INED to improve independence. King IV reform changed the "apply or explain" rule to the "apply and explain" rule in 2017.

In our research analysis, we bring insights into three major areas of empirical research. Firstly, in investigating the determinants of agency costs, we choose specific board characteristics unique to the Johannesburg Stock Exchange (JSE). Secondly, we explore the role of institutional investors in monitoring and controlling agency costs. Finally, the effects of the rules change from "apply or explain" to "apply and explain" period. The plan of this paper is as follows; the second part is related to literature and formulation of hypothesis. Part three deals with the methodologies, part four presents the results and discussions, and

the final part concludes and gives recommendations for future research.

2. Literature Review

2.1. Agency Costs

Agency costs are economic concepts that arise between the shareholders (principals) and the management of a firm. The conflict between corporate agents and controlling shareholders is essential to the study of the modern-day agency problem (Jensen & Meckling, 1976). The agency theory encapsulates the supervisor nature of shareholders and compares to the sole proprietor or partnership as distinct roles. In contrast, the sole proprietor or partner has adequate control and information over their business; the shareholders do not have absolute control over the daily affairs of the firm. Power is delegated to the management to act in utmost good faith for the shareholders. The delegation creates a hiatus in information access (Abor & Biekpe, 2006; Henry, 2010). The agent herein management will have access to insider information that may not be easily accessible by the principal. The agency theory identifies the shareholders cannot oversee every daily activity of the business. Researchers have investigated this problem at various levels of the organizational structure. Both principals and agents have competing self-interests that will ruin the company and its stakeholders if not aligned. The principal's role is not to control affairs and provide strategies for the firm but intervenes when the agent exploitations are against the authority offered him to work to the detriment of the shareholder. Agents with power will try to obtain their self-interests in contrast to maximizing the wealth of the principal (Jensen & Meckling, 1976; Wang, 2010).

According to Huu Nguyen et al. (2020), the focus of agency theory on agency conflicts arising from managers gives a different dimension to a firm's objectives. Shareholders are not closely associated with the daily work environment and therefore do not grasp the real situations essential for business decision making. Shareholders anticipate higher dividend payouts to increase their wealth needs and grow their capital base. However, managers with direct access to vital information tend to have an appetite for higher risk. Agency costs are expenses internally generated by firms. Agency costs occur as a result of the competing interest of the management team and the shareholders. It includes hidden decisions which do not aim at maximizing the shareholders' worth. The management teams are agents working for their principals, the shareholders.

The agents work in almost good faith to perpetuate the firm's wealth but now and then do the contrary (Wang, 2010). Since the principals cannot monitor the agents, every step and decision undertook the information hiatus suffices. This information hiatus leads to a lack of consensus-building and ethical risks. It is also evident when management misuses the firm's assets, invests in unprofitable ventures, and enriches themselves. Following (Fama & Jensen, 1983; Jensen & Meckling, 1976) is the spirit of agency cost theory. To allay the agency problems lies in how the shareholder and management structures are designed. Agency

costs are evident in establishing suitable corporate governance mechanisms, and effectively applying the supervisory principles reduces the conflict between the management team and the shareholders. Good governance and effective mechanisms attract institutional investors where their risks are secured (Huu Nguyen et al., 2020; Nguyen et al., 2017).

The concept of corporate governance has existed for centuries. Most countries have unique governance codes. Large public firms have a large dispersed shareholding base in the United Kingdom, the United States of America, and Australia (Porta et al., 2000). A dispersed shareholding makes the management undertake major and most decisions concerning the business. In emerging markets, the contrast exists. Shareholders hold the firms' ownership with a significant equity fraction. The concentrated shareholders can influence the decisions undertaken by management. Emerging market economies nevertheless have made substantial corporate governance treads over the past decade, as the approvals and reviews of governance codes and appropriate regulations have led to improved standards disclosure, improved levels of board independence, and protection codes for the shareholder (Papadopoulos & Mishra, 2019).

According to Gherghina (2021), studies on countries' governance have investigated the benefits of reforms in corporate governance. Reforms have impacts on the conflicts between the management and shareholders. The results recommend that firms allay inefficiencies in the boardroom and create mechanisms that promote and protect the shareholders' wealth (Kieschnick & Moussawi, 2018). Firms with relatively poor governance structures tend to associate themselves with higher levels of agency costs. As a result, firms with higher agency costs will have powerful management who exhibits corrupt behaviours that compete with the shareholder's interest and enrich managers with self-interests (Amran et al., 2010).

Vijayakumaran (2019) indicated that firms with greater management ownership opt for debt financing, which prior literature establishes reduce agency costs. Board characteristics, including the board size and board independence, have no significant effect on agency costs (Allam, 2018). Ullah et al. (2018) use the GMM system to deal with endogeneity and observed firm variables. Furthermore, firm size and the asset utilization ratio (a proxy for agency costs) indicated significant positive results (Akram et al., 2020). Large firms have lower agency problems. The reason attributed is large firms have a high assets reserve base which influences shareholders choices and judgments (Vijayakumaran, 2019). In Vietnam, Huu Nguyen et al. (2020) employed three statistical tools: the ordinary least square, fixed-effects, and random-effects. The study posits creating effective corporate governance mechanisms will control opportunistic management behaviour—a practical tool to lower the competing needs of shareholders and management reduce the agency costs. According to Ang et al. (2000), Chen & Yur-Austin (2007); Florackis (2008); Huu Nguyen et al. (2020) identified three measurements of agency costs in accounting and finance literature.

These include the assets utilization ratio, selling, distribution and administration expenses ratio and the divergence between cash flow rights and voting rights.

In ownership structure studies, firms with pyramidal or cross-holding structures have a high percentage that shares voting rights, including the power to elect the board of directors and the approval of business decisions and cashflow rights (ownership rights) for claiming dividends are different (Hong et al., 2017). The corporate governance theory asserts there should be a balance between control and ownership. The study implies that shareholders have the same right to control and ownership associated with cash flow. Therefore, the separation of voting rights and cashflow rights aggravates the type 2 agency problems, which involve shareholders (Park et al., 2019). Specifically, in some countries such as Japan, Korea, Germany and Italy, companies are inclined to apply a cross-sharing holding structure, which means ownership is fixated on a cluster of institutional shareholders.

The method of measuring agency cost depends on how the ownership is structured. In market-based financial economies like the UK and the US, firms are likely to encounter the type 1 agency problem. In these economies, disclosure quality and minority rights are protected. Empirical studies by Ang et al. (2000) indicated two proxies for measuring agency costs. The methods include assets turnover/assets utilization and expense ratio. While the assets utilization measures how effective and efficient the management board has utilized the firm's assets, the expense ratio assesses discretionary management behaviour in spending firms' resources (DePamphilis, 2012). The results indicate the higher the expense ratio cost and the increased agency costs. Countries with mostly cross-board ownership, especially in the Asian region, Japan and Korea, have a financial system operating on bank-based systems. In these systems, banks provide debt as well as equity making them part owners of the firm. Banks are essential and valuable in financial distress decisions. Their representation on the board makes a vital ingredient for strategic decision making. In this system, banks are monitoring agents as well as sponsors for the firms. These specialized financial systems build trust and extend relations with the firm, creating the type 2 agency problem (Norli et al., 2015).

The South African Context

South Africa is an emerging country; in 1994 published its first corporate governance code (King I). The committee responsible for the report deemed it an opportunity to educate the newly democratic South Africa public on to work toward a free economy. The South African Code unlike the Sarbanes-Oxley is non-legislative, based on principles and practices. In 2002, King II was published with sections on risk management and sustainability following the Earth Summit held in Johannesburg. Subsequently, King III was published. It recommends the need for firms to produce integrated reports. It also recommends for organizations to report sustainability issues according to Global Reporting Standards.

Chapter one of King III gives guidelines for the suspension of the stock options of the INEDs. King III operated on the “apply or explain” rule. In 2017, a revision of the “apply or explain” rule to “apply and explain”. The modification assumes a significant change in compliance with the corporate governance principles. Again, it may improve communication between shareholders and managers, accountability, transparency, supervision, and oversight improvements. The effect will be a reduction in agency costs which is caused by information hiatus.

In South Africa study on agency problems by [Abor & Biekpe \(2006\)](#) confirms the existence of agency problems in the Small and Medium Enterprises (SMEs) listed on the JSE. Even though prior literature supports low agency problems in low growth firms, South Africa listed SMEs differ. The studies on agency costs and capital structure of 68 SMEs listed on the JSE concluded that firms with a major blockholder effectively allayed the opportunist nature of management compared to the firms with multiple institutional investors. Effective monitoring has led to a firm’s growth and its ability to acquire more debt. Therefore, debt acquisition pushes management to invest in riskier ventures and even divert resources for their interests. The situation results in creating the type 2 agency problem between the shareholders and the debt financiers. South African markets are beacons in the Sub-Saharan African region. The JSE has a developed system with global standards and practices. The reforms in its corporate governance codes make it attractive for international investors. Adopting Integrated Reporting combines the financial, social and environmental information and innovation to bridge the gap that creates agency costs. [Corvino et al. \(2020\)](#), although the level of the JSE agency problems might differ from the developing countries, their measurements will nevertheless be used on corporate governance principles unique to the South African economy. Similarly, [Ang et al. \(2000\)](#) confirm this in a study of US small firms. It reveals that the more the ownership of the firm is concentrated, the lesser the agency costs.

In related studies, [Moez \(2018\)](#) explores the internal corporate governance structures on agency costs. He studied 125 French firms from 2010-2015 from various sectors. The study concluded that controlling shareholders have a significant influence on management decisions. They vote out proposals they oppose or sell their sales out when conflict arises. The dividend policy was one mechanism identified to allay the disputes between the management and the shareholders. [Henry \(2010\)](#) discloses the relation between corporate governance and agency costs on the principles and best practices recommendation for listed firms in 2003. The study compares the prior years and after years of issuing the code of best practice. Results of the study show that the adjustment required by the Australian Securities Exchange significantly minimizes the agency cost inherent in the firms. This paper acknowledges that the concept to internationalize the South Africa economy has attracted most investors and led to major reforms in the country’s corporate governance code ([Gachie & Govender, 2017](#)). In 2019, the JSE records 52% of JSE investors had international status ([Hamad et al.,](#)

2020). Again the reforms in King IV make it essential to study the listed firms in South Africa. The reforms moved from the “apply or explain” principle to “apply and explain”. Also, one chapter was dedicated to institutional ownership and how they can monitor suitable investments. Furthermore, the suspension of share options for independent directors motivated the research for the listed firms on the JSE and their level of compliance.

2.2. Hypothesis Formulation

The important contribution of this paper is determining the impact of the King IV rule on “apply and explain” on agency cost levels of listed firms in South Africa’s JSE. This encompasses constructing a measure that is representative of the degree of compliance by firms with the JSE Corporate Governance principles and best practice recommendations. Relating variation in mandatory “compliance” with a number of agency cost proxies will inform whether the introduction of King IV recommendations and, more specifically, firm compliance with these recommendations will generate agency cost reduction benefits. The underlying hypothesis being examined is that “apply and explain” compliance with the index representation of the JSE Corporate Governance “code of practice” will be associated with a lower agency-cost platform, or effectively the expectation of a statistically significant negative relationship between governance code compliance and firm-level agency costs. Due to the inability to perfectly replicate the degree of compliance with the JSE Corporate Governance “code of practice”, the focus is placed on the structural governance attributes associated with the Code that can be empirically operationalized. Of the 17 best practice recommendations, we select two which require the disclosure of specific information (The board of directors and institutional ownership). Of these specified measurable elements, we choose the board size, board independence, board female diversity, multiple directorships as factors affecting the board of directors, and the percentage shareholdings of the institutional investors to represent institutional ownership.

2.2.1. Board Size

Many authors have explored the board size impact on agency conflicts. Some authors believe the larger the size of the board, the higher the board performance. A bigger board size can provide valuable advice for strategic business decisions. Also, a large board size will provide a variety of expertise which will improve firms’ performance (Saini & Singhania, 2018; Uadiale, 2010). Other contraries insist a large board size is harmful and it has a high impact on agency costs. The chief executive finds difficulties in thrusting his business decisions on the board without encountering counter ideas. The problem also arises with coordination among the board members. Agency costs generated with the issue of coordination result in poor communication and uncooperative attitudes with board members. Getting a suitable time for all members for board meetings proves difficult—eventually, decisions making delays. When the board members

views are incredibly different, the cohesion between them becomes weak. When the board size increases beyond a specific number, the costs outweigh the benefits (Chaudhary, 2021; Cheng, 2008).

Vijayakumaran (2019) reinforces the idea for firms to adopt smaller boards in Chinese firms. The study investigates the Shanghai and Shenzhen stock markets. It predicts that long periods spent on strategic decisions and business policies lead most members to follow a few vocal and dominant members. Considering this case supports the negative impact of agency costs where members payments represent no work done to ensure shareholder needs and reduce agency costs. Even though most papers stress the need for small boards, other studies advocate for optimal numbers (Coles et al., 2008; Price, 2018). The optimal number suggested is 8 or 9 board members. In South Africa, the King IV code does not specify a minimum or maximum number for firms to adhere to as a primary standard. The principles in King IV allow for flexibility in the selection of board members. It will enable a firm to put appropriate mechanisms to select members who will work to achieve its desired objectives, provide logical explanations (Natsesan & du Plessis, 2018).

Following the literature mentioned above, the study can recapitulate whether a smaller or bigger board size is better depending on firm characteristics and the country's corporate governance code, which dictate differences in the board of directors' function. In this paper, US and UK empirical-based works are predominantly considered and expect that:

H1: There is a significant positive relationship between the board size and agency costs in the "apply and explain" period.

2.2.2. Board Independence

Board members comprise executives on the firms' payroll and Independent Non-Executives Directors (INEDs). INEDs do not necessarily minimize agency problems to a significant extent. The firm does not employ INEDs (Fama & Jensen, 1983). Prior studies on board composition, which INEDs dominate support and control the management team. The INEDs do not engage in the daily activities and management of the firm. They undertake policymaking and design strategic decisions (Huu Nguyen et al., 2020; Razzaq & Niazi, 2018). Furthermore, in undertaking their core mandate and daily tasks such as production, marketing finance and administration, the executive directors need a supervisory authority for accountability (Brown et al., 2011).

In South Africa, Meyer & de Wet (2013) share positive impacts on board independence and firm performance concerning earnings per share. Still, they have no significant effect on market variables. Similar studies by Abor & Adjasi (2007) express that Small firms create a new strategic outlook through independent executive directors. Other authors predict INEDs catalyze transforming the internal audit tools, which boost the firms' performance. Incorporating more INEDs creates a board that monitors, especially the Chief Executive, to minimize the discretionary powers of the management team and protect the interests of

shareholders (Kostyuk & Barros, 2018; Yusoff & Alhaji, 2012).

Despite the enumerated positive effects presented by prior literature, few studies propound different results. Suzuki & Tho To (2019) found a U shape relationship; Connelly et al. (2017) found no relation, and Dang et al. (2018) found a negative relationship between board independence and agency costs which supports the fact that INEDs may lack the expertise in that particular section. Lack of expertise leads to improper monitoring, which creates agency costs and worsens the firm performance. However, this paper investigates the power of “apply and explain” and how the suspension of the stock options for independent directors will reduce the agency costs.

H2: There is a significant negative relationship between board independence and agency costs in the “apply and explain” period.

2.2.3. Board Female Diversity

The past two decades have presented the urgency to involve women on Firms’ boards. Research identifies that boards are still not diverse. Management has received calls to include females in press calls, academic literature, and other stakeholders in the board room (Wellalage & Locke, 2013). Statistics from the European Union (EU) had about half of its labour force as women. Only 7.9% of women were in CEO positions and 19% in executive positions (Schwartz, 2020) 6% of women CEOs in the UK’s FTSE top 100 firms identified by Taylor (2019). In contrast, female CEOs in the US S&P 500 companies were 6% (Stych, 2021). In emerging countries, Asian economies have the highest of women representation, with 9% of firms’ appointing female CEOs (Lee, 2020). On the JSE, the number of female CEOs remains at 19, comprising 6% (Khaya, 2020). Globally, South Africa is ranked 4th according to a Deloitte global survey.

Female diversity has received ostensible consideration. Wellalage & Locke (2013) posits that board diversity has positive impacts on agency costs. In his Study of Sri Lankan listed firms’ and agency costs, he asserts the economy does not have many qualified females, and firms’ may prefer a homogenous board. Sun et al. (2011) investigated women on the audit committee and reported no relation to the committee work. Wang et al. (2021) confirm in a study in non-financial firms in China that women leadership do not influence decision making.

Ain et al. (2020) supports diverse female boards and conclude that these boards effectively allay the agency costs caused by firms’ different needs. Additionally, female directors curb agency problems in state-owned enterprises (SOEs), where agency conflicts are high. Hewa Wellalage (2011) provides evidence from emerging countries where external corporate governance is weak diverse boards help restraint agency costs. Gull et al. (2018) find that women leadership selected based on statutory attributes are great monitors than women selected on blind quotas.

King IV advocates for listed firms to be diverse to create value, access the rich talent pool of individuals, promote sustainability and increase competition. The

King IV code, however, does not give mandatory percentages for the number of women on the board. With the much emphasis and research, the number of female directors is low, the paper assumes:

H3: There is a significant negative relationship between board diversity and agency costs in the “apply and explain” period.

2.2.4. Multiple Directorships

Prior research had had conflicting evidence on the impact of multiple directorships on the firm. Numerous directorship is a global phenomenon spiking an international debate in corporate governance studies (Ferris & Jayaraman, 2018). Some academicians and practitioners argue the benefits of various directorships on quality. Harris & Shimizu (2004) argue boards are not too busy to be “stretched.” Multiple directorships are essential assets for knowledge acquisition for strategic decisions and improving performance. Elyasiani & Zhang (2015) contends multiple directorships do not harm the firm. These directors do not neglect their responsibilities. The director’s values are enhanced through interaction with others on different boards. The study uses the 3SLS technique to account for endogeneity. In India, Pandey et al. (2019) share a positive but weak relation, whereas Chakravarty & Rutherford (2017) find multiple directors to lower the cost of firms’ debts.

Benson et al. (2015) explain that multiple directorships do not fully explain the shirk of directors’ responsibilities. He stresses busy executives correlate with lower merger premiums. Furthermore, small firm sizes have accrued more benefits than established firms. Clements et al. (2015) also agree that directorship in a related industry brings positive effects, and smaller firms again benefit from it.

Cashman et al. (2012) disagree with the above and give evidence to increase directors’ workload. When the director’s workload increases, there is a negative relationship with firm value. The study results reveal a dramatic effect of the link with the inclusion of the firm fixed effects. Fich & Shivdasani (2006) confirm that directorship of three and above is associated with weak corporate governance. The directors’ duty as monitors becomes ineffective—the firm’s exhibit a lower market to book ratio, declining profits, and lower CEO sensitivity. Studies from Germany show that the busy boards induce more payment for maintaining directors (Andres et al., 2013). Ahn et al. (2010) explain the negative effects of management oversight in examining stock acquisition and announcement timing. There is weak monitoring and thus an increase in agency costs in stock acquisition decisions.

Most countries place a ceiling on the number of directorships an executive member can hold to balance and gain optimal benefits (Falato et al., 2014; Tham et al., 2019). Despite the reforms in King IV, there is no explicit guideline for directors’ overboardness. Activists have made bear the poor meeting attendance, reflecting the work overload of company directors (Mans-Kemp et al., 2018). The paper therefore suggests:

H4: There is a significant positive relationship between the board directorship

and agency cost in the “apply and explain” period.

2.2.5. Institutional Ownership and Agency Costs

The South African King IV superseded King III in 2016. According to the King IV recommendations, corporate governance mechanisms such as institutional investors catalyzes value creation. The principles advocate stakeholder centric governance. If institutional owners apply the principles aforementioned in King IV, it will decrease short-term profit-seeking ventures. The report seeks to create long term value (Harber, 2017).

The principle last principle of King IV (principle 17) is dedicated to the specification of the role of institutional investors. Principle 17 advocates institutional investors as the agents to monitor and enhance responsible investments Rajoo (2020). The Code for Responsible Investment in South Africa (CRISA) further elaborates the principle 17. The Code urges institutional investors to consider and promote practical approaches to minimizing the cost of investment. Additionally, institutional investors should reinforce corporate governance principles associated with the UN-backed Principles of Responsible Investment (Natsesan & du Plessis, 2018).

Davis (2019) echoes the growth of institutional ownership on firm value and costs. Institutional ownership unaligned the opportunist behaviour in management. Institutional investors hold a substantial majority of the company shares (Artiga González & Calluzzo, 2020). Institutional ownership has risen to 70% within the past three decades in the US. According to Zhang (2016), South Africa has about 52% institutional investment. The increase manifests the positivity of monitoring by the investors. Harber (2017), Martina (2016) and Callen & Fang (2013) confirm government pension funds are effectively monitored to avoid future crash risks.

On the contrary, Kim et al. (2019) examine the different types of institutional investors. Kim explains that agency costs correlate with term short institutional investors. The short-term investors put unsurmountable pressure on the management. Continuous pressure might lead to risky projects undertaken not in favour of the long-term benefits. Prior studies that confirm a negative effect of institutional investors include Altunbaş et al. (2020), claiming that institutional investors support CEOs risky ventures. Manconi et al. (2012) describe exposed liquidity constrained investors as a threat to boosting crisis to corporate bonds. Callen & Fang (2013) and Pozen (2015) indicate independent investment advisors and bank trusts are free-rider monitors and tend to increase the risk of a future crash of the firm. Finally, Larcker et al. (2015) examine institutional investors who outsource their voting rights, resulting in decreased firm value.

Further, this link is more pronounced among pressure insensitive institutional investors. These include pension funds and mutual funds. Elyasiani et al. (2010) also discovered that both types of institutional shareholding impacted profitability. However, pressure insensitive investors have a more significant impact on enterprises' profitability. After the above debate and the growing numbers of in-

stitutional investors in South Africa as per the requirements of King IV, we assume:

H5: There is a significant negative relationship between institutional investors and agency costs in the “apply and explain” period.

H5a: There is a different effect of pressure-sensitive and pressure insensitive institutional investors on agency costs in the “apply and explain” period.

3. Methodology

3.1. Data Collection

The study investigates the effects of agency costs before and after revising the King report principle of “apply and explain”. It examines the corporate governance impacts on agency costs in the Johannesburg Stock Market (JSE). The data was collected from integrated financial reports of listed firms from the period 2013 to 2019. The collection ends in the year 2019 because of the tremendous impact of the Corona Virus in 2020. The virus changed most accounting reporting systems around the globe. In this paper, firms that do not have the required ratios were eliminated. The study did not include financial firms because of the different economic, regulations and risks associated with the sector. The regulatory and governance structure of the financial industry is different from those of other, non-regulated sectors. They are subjected to external monitoring and scrutiny from institutions such as the Reserve Bank of South Africa. The scrutiny of such regulatory bodies renders corporate governance mechanisms less important. It can potentially interfere with corporate governance variables, dependent variables, and the relationship between the two (Majoni, 2019). Finally, the paper removes extreme values that served as outliers.

The study gathered 110 pressure insensitive institutional ownership firms (treatment firms) and 135 pressure-sensitive firms (control firms). Institutional investors are classified and distinguished based on their monitoring incentives (Hutchinson & Gul, 2004). Pressure Sensitive investors are large financial institutional investors (banks, investment and insurance firms as their most significant shareholders) who have a business relationship with the company. They play a less governance role because of their business relationship with the company. The pressure insensitive shareholders include nominee or trustee shareholders, who hold large amounts of assets in the form of securities on behalf of investors (pension funds, fund managers and government trustees).

3.2. Model Specification

The study uses the Generalized Least Squares and Fixed Effects Model to give results of the whole sample. The Difference in Difference Method finds the post effects of the “apply and explain” period.

3.2.1. Model Specification (GLS, FEM)

In testing our hypothesis, the following regression model is used:

$$\begin{aligned}
AC_{i,t} = & \beta_0 + \beta_1 \text{BOARDSIZE}_{i,t} + \beta_2 \text{BOARDINDE}_{i,t} + \beta_3 \text{BOARDDIV}_{i,t} \\
& + \beta_4 \text{BOARDDIR}_{i,t} + \beta_5 \text{INSTOWND}_{i,t} + \beta_6 \text{FIRMSIZE}_{i,t} + \beta_7 \text{ROA}_{i,t} \\
& + \beta_8 \text{FIRMAGE}_{i,t} + \beta_9 \text{LEVERAGE}_{i,t} + \beta_{10} \text{CEOTENURE}_{i,t} \\
& + \beta_{11} \text{INDUSTRY}_{i,t} + \beta_{12} \text{YEAR}_{i,t} + \varepsilon_{i,t}.
\end{aligned} \quad (1)$$

3.2.2. Model Specification (DiD)

$$\begin{aligned}
AC_{i,t} = & \beta_0 + \beta_2 \text{POST}_{i,t} + \beta_3 \text{INSTOWND}_{i,t} + \beta_4 \text{POST} * \text{INSTOWND}_{i,t} \\
& + \sum \beta_5 \text{Boardx}_{i,t} + \sum \beta_3 \text{Controls}_{i,t} + \varepsilon_{i,t}.
\end{aligned} \quad (2)$$

where: i is individual firm observation t is the within-group time index; $AC_{i,t}$ = Total sales divided by total assets or the ratio of discretionary costs on sales; $\text{BOARDSIZE}_{i,t}$ = total number of board members; $\text{BOARDINDE}_{i,t}$ = the percentage of independent directors; $\text{BOARDDIV}_{i,t}$ = percentage of women on the board; $\text{BOARDDIR}_{i,t}$ = average number of directorship held in other firms; $\text{INSTOWND}_{i,t}$ = proportion of institutional shareholding to total shares; $\text{FIRMSIZE}_{i,t}$ = log of firm assets; $\text{ROA}_{i,t}$ = ratio of net profit before tax to total assets; $\text{FIRMAGE}_{i,t}$ = log of firm years; $\text{LEVERAGE}_{i,t}$ = the debt to equity ratio; $\text{CEOTENURE}_{i,t}$ = number of years of CEO position; $\text{INDUSTRY}_{i,t}$ = sector of operation; $\text{YEAR}_{i,t}$ = year dummies for financial year; $\text{POST}_{i,t}$ = dummy variable where 1 is the years after 2017.

3.3. Dependent Variable

Agency Costs (AC)

Past literature indicates there are types of agency costs. The two dominant ones in South Africa are type 1 and type 2. The study, therefore, considers two proxies for each of the agency costs. Regarding type 1, the paper uses the asset turnover ratio. The report uses the asset turnover ratio to measure management effective use of the firms' assets. Total sales divided by total assets measure it. The second proxy for agency costs is the expenses ratio. This ratio is considered because most of the institutional stakeholder activism in South Africa is based on excessive managerial perks, entertainment allowance and travelling expenses. It is a ratio of discretionary costs on sales. It is, therefore, appropriate to include both ratios to assess and reflect the depth of agency costs in South Africa (Dang et al., 2018; Vijayakumaran, 2019).

3.4. Independent Variables

3.4.1. Board Size (BODSIZE)

The paper defines board size as the total number of directors chosen in a particular year on the companies' board. Prior literature indicates a large number leads to difficulties in collaboration and effective teamwork. Members might spend more time concluding on sensitive strategic decisions leading to inefficient use of the firms' resources. The paper assumes board size will have a direct negative impact on assets utilization. The more the directors, the more money expended on their welfare. Since King IV sets no ceiling on the number of di-

rectors, the firm might choose as many as it deems fit, increasing expenditure. Secondly, the expenses ratio will have a significant relationship with the board of directors.

3.4.2. Board Independence (BI)

The paper calculates the variable as a percentage of the Independent Non-Executive Directors (INEDs) on the board for a particular financial year. Prior literature indicates the inclusion of INEDs will fill the hiatus of experience and knowledge management creates. King IV calls for the majority of INEDs on boards. The King IV code considers the INEDs to be unbiased and objective in the decisions for stakeholders. The paper predicts that the more INEDs on boards, the greater the independence and the lower the agency costs.

3.4.3. Board Diversity (BODDIV)

The Study defines diversity as a proportion of female directors on the firm's board for a particular financial year. Prior literature has mixed results showing the insignificance of females on boards. Others are positive/negative effects on firm performance (Post & Byron, 2015). King IV advocates for more women, but no minimum quota is made. The paper predicts a decline in agency costs with the inclusion of more females.

3.4.4. Board Multiple Directorship (BOARDDIR)

The average number of director positions held in other firms. In South Africa, on averagely, the director holds 2 - 3 different directorships. Prior studies before the introduction of King IV do not find consistent results showing a more unsatisfactory performance by firms (Chiranga & Chiwira, 2014). King IV advocates for multiple directors to acquire experience and knowledge. The paper, therefore, predicts multiple directorships will equip the directors to curb agency costs.

3.4.5. Institutional Investors (INSTOWND)

The ratio of the institutional shares of the firm to the total number of shares outstanding. The study forecasts institutional shareholding improvements in the King IV period. King IV principle 17 is dedicated to institutional shareholding. Therefore, the paper predicts that institutional sharing will eliminate most agency costs. The variable will be a dummy. The study digs further and groups the institutional investors into two types, pressure-sensitive institutional investors (IIP) and pressure insensitive institutional investors (IPS).

3.5. Control Variables

3.5.1. Firm Size (FIRMSIZE)

The study calculates firm size as the logarithm of firms' total assets. The paper expects large firms have fewer agency costs. This negative relationship is because large firms acquire more resources to mitigate agency costs.

3.5.2. Return on Assets (ROA)

Ratio of net profit before profit and tax to total assets. Fama (1980) finds a nega-

tive correlation between firm performance and agency problems.

3.5.3. Firm Age (FRIMAGE)

It is calculated as the logarithm of the firm's number of years in existence. [Abubakar Nuhu et al. \(2020\)](#), the paper expects old firms to handle the agency problems efficiently.

3.5.4. Leverage (LEVERAGE)

The paper calculates leverage as debt to equity ratio. The more the debt means the firm is under the control of creditors. Creditors are good monitors of their investment and hence fewer agency costs ([Zakaria et al., 2016](#)).

3.5.5. CEO Tenure

The number of years the CEO has been in that position in a firm ([Uğurlu, 2000](#)). The paper expects the long-serving CEOs to be positively related to increasing expenses.

3.5.6. Industry

It is measured by the industry in which the firm operates. The paper uses the Johannesburg Stock Market industry classification index. It comprises ten categories: Oil and Gas, Consumer goods, Basic materials, Healthcare, Industrials, Consumer Services, Telecommunications, Utilities, Financials, and Technology.

3.5.7. Year

Full year measured from 2013-2016; the study again measures it as a dummy using the 2017 to 2019 as post years for analysis.

The hypotheses of the relationship between independent and dependent variables are outlined in [Table 1](#) below.

4. Results and Discussions

4.1. Descriptive Statistics

[Table 2](#) shows the descriptive statistics for the main variables used in the study's model. Using Stata to examine 245 listed South African companies shows the result produced, including minimum, maximum and standard deviation, to present the trend in agency cost and issues affecting it. The data shows that the average agency cost measured by asset turnover is 19.39, with a standard deviation of 17.31 and values ranging from 0.05 to 48.85. The number of board directors ranges from 5 to 24 members, with an average of nine members. Compared to other emerging countries like Vietnam, South African firms' average board size is high with nine members. It is similarly related to companies in Spain, which have ten members, and in the US, they have nine members ([Grana-do-Peiró & López-Gracia, 2017](#); [Huu Nguyen et al., 2020](#); [Kieschnick & Mous-sawi, 2018](#)).

Additionally, board independence calculated by the Independent Non-Executive Directors to total directors has an average of 53.99%, with a minimum of 0% and

Table 1. Hypotheses summary.

Independent variables	Description	Agency Costs
BoardSize	Number of board members	+
Board Independence	Percentage of independent directors	-
Board Diversity	The ratio of female directors	-
Board directorship	The average number of multiple directorships	+
Institutional investors	Number of shareholdings held by the institutional investor	-
Firm Size	Log of total assets	-
Firm age	Log of firm age	-
Return on Assets	Net profit before tax by Total Assets	
leverage	Total debt to equity ratio	-
CEO tenure	CEO serving years	+

Table 2. Descriptive statistics.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Obs	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Mean	19.390	17.689	9.8174	53.996	8.8320	1.8950	49.784	41.240	44.126	7.6740
StD	17.314	35.1516	2.8139	17.876	8.6267	1.214	19.229	33.889	18.877	5.7658
Max	48.85	242.977	24	100	38.888	3	93	169	99.668	32
Min	0.0551	0.0016	5	0	0	0	9	2	0.5247	1

Source: Authors Construction using Stata. Where (1) is Agency cost measured by Assets Utilization; (2) is Agency Costs measured by Expenses ratio (3) Indicates the Board Size (4) is the Board Independence (5) denotes Female Board Diversity (6) is Board Multiple Directorship (7) is Institutional shares held by the firm (8) is firm age (9) is leverage and (10) represents the CEO Tenure.

a maximum of 100%. It is a fair representation, describing how independent a board can be. It also shows that some firms were not having INEDs on board before the “apply and explain” period. The mean of female board diversity is 8.83, while the maximum is 39%, identifying females present in the board room is relatively low. Board multiple directorship average is 2, which means average South African boards are not busy and burdened.

Besides, there is an element of institutional ownership in at least all the firms on the JSE. The minimum number of shares owned in a firm is 9%. Institutional investors also dominate other firms with a maximum share allocation of 93%. On average South African firms have 50% of their shares being held by institutional investors.

Table 3 displays the correlation matrices of all variables for the sample of 1750 observations to diagnose the presence of multi-collinearity. When the correlation between independent variables is lower than 0.5, it means their correlations are

Table 3. Pearson correlation analysis.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1)	1.0000									
(2)	-0.1446	1.0000								
(3)	-0.0261	0.0481	1.0000							
(4)	0.0137	-0.0328	0.3174	1.0000						
(5)	0.0038	0.0414	0.4348	0.5529	1.0000					
(6)	0.0252	-0.0502	-0.0679	-0.0465	-0.0339	1.0000				
(7)	0.0024	-0.0830	-0.0405	0.1045	0.0371	-0.0991	1.0000			
(8)	-0.0210	-0.1173	0.2021	0.2793	0.1596	-0.0717	0.0414	1.0000		
(9)	0.0134	-0.0229	0.1981	0.1317	0.1862	-0.1205	0.0770	0.1571	1.0000	
(10)	-0.0160	0.0692	-0.1834	-0.0027	-0.0163	-0.0909	0.0191	-0.0596	0.0080	1.0000

Source: Author Construction using Stata. (1) Agency cost measured by Assets Utilization; (2) is Agency Costs measured by Expenses ratio (3) Indicates the Board Size (4) is the Board Independence (5) denotes Female Board Diversity (6) is Board Multiple Directorship (7) is Institutional shares held by the firm (8) is firm age (9) is leverage and (10) represents the CEO Tenure.

weak. The study concludes that there is a low likelihood of the multi-collinearity problem in the regression model.

4.2. Empirical Analysis

Table 4 uses the Fixed-Effects Model (FEM), General Least Square (GLS) and the Difference in Difference (DiD) method to examine the impacts of institutional ownership on the companies on the Johannesburg Stock Exchange. The FEM bridges and improves the results by considering fixed observations such as industry and year related effects. The investigation results are with a statistical significance range of 1%, 5% and 10%.

In the study, the board size is negatively related to assets turnover ratio at 0.05% significant levels in Model 1 with a coefficient of 0.179, indicating the larger board size, the larger the agency costs. Similarly, the board size is positively correlated with the expense's ratio with a coefficient of 0.126 in Model 2. In Model 3, the board size has a negative coefficient of 0.467 with assets turnover, and Model 4 positively correlates between the board size and the expenses ratio of 0.22. The result presents a negative relationship between board size and asset turnover, then a positive relationship with agency costs. The expenses ratio correlates positively with board size. In other words, South African listed companies with larger board sizes may not reduce agency costs. The results confirm studies such as [García Martín & Herrero \(2018\)](#). The results presented confirm H1. The negative relationship between board size and assets turnover will decline the efficient use of the firm's assets. The firm will make more expenses on the board members while the board members will have difficulties cooperating and strategizing for the firm's benefit. The large board size may be harmful to the rise in agency costs. The CEO may impose their positions on the board decisions. The

Table 4. Regression analysis.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ACT1	ACT1	ACT2	ACT2	ACT1	ACT1	ACT2	ACT2
BODSIZE	-0.179* (-0.83)	-0.467** (1.16)	0.126 (0.535)	0.22 (0.739)	0.499* (0.216)	0.287* (0.916)	0.141 (0.486)	0.26 (0.155)
BODINDE	0.0282* (0.06)	0.0307 (0.03)	-0.023 (-0.09)	-0.009 (-0.739)	-0.545* (0.352)	-0.015 (0.730)	0.0127* (0.675)	0.009 (0.743)
BODDIV	0.0143 (0.08)	0.0377 (-0.06)	0.025 (0.752)	0.040 (0.539)	0.276 (0.848)	-0.216 (0.826)	0.447 (0.539)	0.066 (0.317)
BODDIR	0.372 (0.84)	0.378 (0.74)	0.192 (0.458)	0.114 (0.656)	0.41* (0.428)	0.441* (0.502)	0.173 (0.502)	0.921 (0.717)
INST	0.0988 (-0.35)	0.397** (-3.26)	-0.073 (0.237)	-0.077 (0.071)	- -	- -	- -	- -
FIRMSIZE	4.789*** (-10.20)	9.664*** (-3.34)	2.50 (0.098)	1.67 (0.36)	-9.916*** (0.001)	-5.039*** (0.000)	3.88** (0.012)	2.232 (0.006)
FIRMAGE	-0.00545 (-0.03)	0.0333 (0.24)	-0.189 (0.056)	-0.109 (0.048)	-0.03 (0.447)	-0.0038 (0.882)	-0.118 (0.107)	-0.77 (0.010)
ROA	-0.00107 (-0.57)	-0.00451 (0.25)	-0.02 (-0.027)	-0.001 (0.048)	0.002 (0.874)	0.005 (0.74)	0.0451 (0.040)	-0.0016 (0.07)
LEVERAGE	0.0448 (-1.50)	0.0751 (1.52)	-0.67 (0.027)	0.50 (0.031)	0.078 (0.215)	-0.017 (0.961)	0.0751 (0.003)	-0.055 (0.017)
CEOTENURE	-0.0269 (-0.29)	0.176 (1.11)	0.051 (0.007)	0.078 (0.308)	-0.184 (0.889)	0.0163** (0.046)	0.086 (0.289)	0.12 (0.122)
industry	- -	0.786** (3.91)	- -	-0.063 (0.879)	- -	-0.7293 (-0.96)	- -	-0.080 (0.835)
year	- -	-0.507 (-1.88)	- -	0.620 (0.10)	- -	-0.395 (-1.65)	- -	0.39 (0.003)
IPI					0.217 (0.04)	0.320 (0.102)	-0.293 (0.022)	0.492 (0.121)
IPS					-0.634 (0.889)	0.528 (0.350)	0.397 (-0.031)	1.28 (0.484)
Constant	34.8 (0.00)	43.15*** (0.001)	2.858 (0.000)	3.58 (0.0000)	91.21 (0.000)	42.63 (0.000)	80.00 (0.000)	78.28 (0.000)
<i>N</i>	1715	1715	1715	1715	1715	1715	1715	1715
<i>R</i> ²	0.072	0.021	0.135	0.120	0.1215	0.1600	0.122	0.182

Source: Researcher Estimation. The values in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.001$.

presence of the INEDs will reduce the expenses ratio, as we notice from the t -values of -0.09 and -0.739 for model 3 and Model 4, respectively. It means the

independence of the board reduces agency costs.

It is evident board independence plays an essential role in allaying the agency costs. The results indicate a positive 0.028 and a negative coefficient of 0.023 for the assets turnover and expenses ratio, respectively, in Model 1 and Model 3. Further, we notice the Model 2 board independence has positive influences with assets turnover with a coefficient of 0.030 and Model 4, a negative coefficient of 0.002 with expenses ratio. Prior literature shows the relation of assets turnover and agency costs to be negative; therefore, this study infers the board independence will allay the firms' agency costs. This might be a primary rationale behind regulators across the globe advocating for a majority of INEDs on the firms' board. The results imply that hypothesis H2 is accepted. The King III recommendation of a majority of INEDs is in line and has made significant efforts in reducing expenses. The expenses ratio results synchronize with [Kostyuk & Barros \(2018\)](#); [Meyer & de Wet \(2013\)](#). There is an increase of INEDs on the board because the company spends less on them. [Anand et al. \(2010\)](#) opine that the more the board's independence, the more the monitoring of expenses. It confirms the analysis that bigger board sizes take longer in decision making, which makes it difficult to achieve objectives.

The results presented for the relationship between female board diversity and assets turnover are positive coefficients of 0.0143 and 0.025 in both Model 1 and Model 3, respectively. The results mean females are good monitors. Females also bring new perceptions on decisions because traditionally, company boards comprise males. The expenses ratio from Model 4 is positive 0.040. The findings from female diversity indicate that females on boards reduce agency costs by improving decisions on assets utilization. As predicted by the study, females do not control operating costs which, are propounded by [Ain et al. \(2020\)](#). Our study confirms [Jurkus et al. \(2011\)](#), women may not have enough control over all aspects of the company primarily because of their numbers on the board.

We find the results of board directorship to confirm prior literature predicting that directors will gain knowledge from other firms to help build up lacking firms ([Rouyer, 2016](#)). Our study was established by Model 1, in which multiple directorships correlate with assets turnover with a positive coefficient of 0.372 and a positive coefficient of 0.378 from Model 2. The prediction for expenses ratio is confirmed by the Model 3 figures of positive coefficient of 0.192. The result means a busy board might not monitor costs effectively. Busy directors do not have time to strictly monitor administration expenses since it is reoccurring expenditure.

The study shows institutional investors are in a favourable relation with assets turnover at a rate of 0.397 at a 5% significance level in model 2. It means the presence of institutional investors may allay the firms' agency costs by monitoring effective investment by management. The institutional investors' adverse relation with expenses ratio at 0.077 for model 4 explains the monitoring of management expenses. There is substantial institutional shareholding in public firms in South Africa, which is not very different from developed countries ([Pozen,](#)

2015). The presence of institutional investors significantly affects the utilization of firm assets and reduces agency costs. It supports hypothesis H5.

Additionally, institutional investors who have business links with the firm are pressure sensitive. The study finds a negative relationship in Model 5 of -0.634 at a significant level of 1% with pressure-sensitive investors and assets turnover. It is an indication that pressure-sensitive institutional investors do not want to break ties with management. Therefore, they risk compromising with management decisions. They do not object to most management plans to save their business deals and maintain their clientele. However, the relationship between the pressure-sensitive investors and expenses ratio is positive, but the variable does not have a substantial relationship and requires further investigation. Contrary, the pressure insensitive institutional investors have a negative relationship (-0.234 and -0.492) with the expense's ratio for both Model 5 and Model 8, respectively, at significant levels. The pressure insensitive investors are more reliable in monitoring management plans. Again, they show their roles in mitigating agency costs by the favourable relation between pressure insensitive investors and assets cover at 0.234 in the FEM model. The results confirm hypothesis H5.

4.3. Additional Analysis

This section discusses results obtained by investigating the impact of institutional investors in general and the pressure insensitive institutional investors after the release of King IV. We examine the effect of “apply and explain” on the role of monitoring of firstly institutional investors and the impact of pressure insensitive institutional investors. In **Table 5**, we observe that among all the Board structure variables, only board independence significantly affects agency cost at 5% significant levels for Model 10 and Model 12. The board independence is having a favourable impact on assets turnover. This implies that the release of King IV strengthens the board independence of firms on the JSE. The higher levels of board independence will lower the agency costs of the firms. Besides board independence, all other board variables play no significant role in curbing the agency costs.

Table 5. Difference in Difference analysis of institutional investors ownership on agency costs in apply and explain period.

	(9)	(10)	(11)	(12)
	INST	IPI	INST	IPI
BODSIZE	-0.343 (0.492)	-0.034 (0.901)	0.258 (0.161)	0.26 (0.155)
BODINDE	0.003* (0.33)	0.0055** (0.352)	0.008* (0.767)	0.009* (0.743)
BODDIV	0.102 (0.39)	-0.0070 (0.743)	0.639 (0.337)	0.066 (0.317)

Continued

BODDIR	-0.43 (0.54)	0.39 (0.389)	0.096 (0.707)	0.921 (0.717)
Firmsize	0.281 (0.071)	3.068 (0.100)	2.24** (0.006)	2.232 (0.006)
firmage	-3.09 (0.112)	-4.87*** (0.000)	-0.077 (0.011)	-0.77 (0.010)
ROA	0.082 (0.32)	-0.002 (0.09))	0.001 (0.080)	-0.0016 (0.07)
Leverage	2.09 (0.14)	0.004 (0.801)	-0.054 (0.019)	-0.055 (0.017)
CEOTenure	-0.333 (0.007)	0.08 (0.822)	0.119 (0.118)	0.12 (0.122)
industry	0.039 (0.65)	0.0419 (0.722)	-0.089 (0.828)	-0.080 (0.835)
year	0.54 (0.043)	0.808 0.059	-0.35 (0.138)	0.39 (0.003)
Post	0.301 (0.0008)	0.777 (0.971)	-0.032 (-0.490)	-0.289 (0.786)
INST	1.89 (0.122)	- -	-0.41 (0.052)	- -
IPI	- -	2.865 (0.116)	- -	-0.94 (0.001)
Post*INST	2.09 (0.14)	- -	-0.519 (0.021)	- -
Post*IPI	- -	-0.086 0.011	- -	-0.794 (0.403)
Constant	84.43 (0.000)	91.21 (0.000)	80.000 (0.000)	78.28 (0.000)
Number		1715	1715	1715
Rsqr		0.1215	0.122	0.182

Source: Researcher Estimation. The values in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.001$.

Again, we report the post effect results of institutional investors and pressure insensitive investors estimated by the Difference in Difference method. First, when the overall institutional investors interact with the post-King IV period, it positively affects assets cover at a 5% significance rate, as depicted in Model 9. It has a negative effect on expenses but is not significant. Further, we find the

pressure-insensitive investors are positively related to assets turnover at a significant rate of 5% and negatively affect the expenses ratio at a significant rate of 1%. This confirms our prior findings that the presence of pressure-insensitive institutional investors minimizes the incidence of agency costs.

5. Conclusions, Recommendations and Research Gaps

This study intended to investigate the relationship between board characteristics and institutional ownership structure with agency cost in South African companies. We noticed there had been a lot of focus on understanding the impact of different categories of institutional investors. We expanded our investigations into the influence of pressure-sensitive and pressure insensitive investors in South Africa before and after the introduction of King IV by taking 245 firms on the JSE from 2013 to 2019.

In the context of South Africa, the agency's viewpoint is consistent with the board size. We noticed the size of the board has a negative impact on agency costs. A larger board might cause problems with cooperation. Again, the CEO may find it easier to impose his judgements on the board. While the board size increases with agency costs, board independence reduces agency costs. Both measures of agency cost show that firms should have sufficient institutional equity ownership to reduce agency-related problems. Investors that are not subjected to pressure negatively impact agency costs, implying this category of investors is more important in decreasing agency conflict. There is no significant association between pressure-sensitive institutional investors.

The study examined the post effects of King IV with total institutional investors sampled and pressure insensitive institutional investors. We investigated the period change from "apply or explain" to "apply and explain" to understand institutional investors' unique issues and considerations. All board characteristics were not significant except the board independence. Board independence had a positive effect on assets turnover and a negative effect on expenses ratio. This proves that King IV improved board independence by recommending a majority of INEDs which increases the firms' systems for protecting the interest of the shareholders.

We found that total institutional investors can decrease agency costs, particularly pressure investors, by greater margins. The observations are similar to the full set data. Finally, we conclude that firms with stronger corporate governance, such as smaller boards and a majority of Independent Non-Executive Directors, will better mitigate agency conflicts in firms. The inclusion of institutional investors is substantially associated with agency costs and reflects their essence incorporating strategic decision and maximization of firms' goals.

The main limitation of the investigation is the exclusion of some governance aspects such as board meetings, CEO duality and other diversity variables. Future works may extend this research by incorporating family ownership as they play different roles than institutional investors. The CEO experience and CEO

background can have implications for agency costs. These variables can be studied in future to gain insights into the bolsters of agency costs of the firms.

The significant implication of the study is to serve as a guide for prospective investors to consider the independence of a board and the value of institutional investors before making an investment decision. Prospective investors should consider firms with greater independence and institutional investment significantly pressure insensitive investors. Their presence enhances monitoring and reduces agency costs.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Abor, J., & Adjasi, C. K. D. (2007). Corporate Governance and the Small and Medium Enterprises Sector: Theory and Implications. *Corporate Governance: The International Journal of Business in Society*, 7, 111-122. <https://doi.org/10.1108/14720700710739769>
- Abor, J., & Biekpe, N. (2006). An Empirical Test of the Agency Problems and Capital Structure of South African Quoted SMEs. *South African Journal of Accounting Research*, 20, 51-65. <https://doi.org/10.1080/10291954.2006.11435121>
- Abubakar Nuhu, B., Isa Dandago, K., Mohammad, L., Bala Ado, A., & Farouk Abdulkarim, U. (2020). Impact of Agency Costs on Financial Performance of Listed Consumer Goods Companies in Nigeria. *The Journal of Management Theory and Practice (JMTP)*, 1, 51-55. <https://doi.org/10.37231/jmtp.2020.1.3.51>
- Ahn, S., Jiraporn, P., & Kim, Y. S. (2010). Multiple Directorships and Acquirer Returns. *Journal of Banking & Finance*, 34, 2011-2026. <https://doi.org/10.1016/j.jbankfin.2010.01.009>
- Ain, Q. U., Yuan, X., Javaid, H. M., Usman, M., & Haris, M. (2020). Female Directors and Agency Costs: Evidence from Chinese Listed Firms. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-10-2019-0818>
- Akram, A., Tang, Y., & Tariq, J. (2020). Unveiling the Effectiveness of Agency Cost and Firms' Size as Moderators between CSR Disclosure and Firms' Growth. *Frontiers in Psychology*, 11, 1624. <https://doi.org/10.3389/fpsyg.2020.01624>
- Allam, B. S. (2018). The Impact of Board Characteristics and Ownership Identity on Agency Costs and Firm Performance: UK Evidence. *Corporate Governance: The International Journal of Business in Society*. <https://doi.org/10.1108/CG-09-2016-0184>
- Altunbaş, Y., Thornton, J., & Uymaz, Y. (2020). The Effect of CEO Power on Bank Risk: Do Boards and Institutional Investors Matter? *Finance Research Letters*, 33, Article ID: 101202. <https://doi.org/10.1016/j.frl.2019.05.020>
- Amran, A., Ishak, M. S., Zulkafli, A. H., & Nejati, M. (2010). Board Structure and Extent of Corporate Governance Statement. *Managerial and Financial Accounting*, 2, 383-400. <https://doi.org/10.1504/IJMFA.2010.035639>
- Anand, A. I., Milne, F., & Purda, L. D. (2010). Monitoring to Reduce Agency Costs: Examining the Behavior of Independent and Non-Independent Boards. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1555043>
- Andres, C., van den Bongard, I., & Lehmann, M. (2013). Is Busy Really Busy? Board Go-

- vernance Revisited: Is Busy Really Busy? Board Governance Revisited. *Journal of Business Finance & Accounting*, 40, 1221-1246. <https://doi.org/10.1111/jbfa.12051>
- Ang, J. S., Cole, R. A., & Lin, J. W. (2000). Agency Costs and Ownership Structure. *The Journal of Finance*, 55, 81-106. <https://doi.org/10.1111/0022-1082.00201>
- Artiga González, T., & Calluzzo, P. (2020). A New Breed of Activism. *Finance Research Letters*, 37, Article ID: 101369. <https://doi.org/10.1016/j.frl.2019.101369>
- Benson, B. W., Davidson, W. N., Davidson, T. R., & Wang, H. (2015). Do Busy Directors and CEOs Shirk Their Responsibilities? Evidence from Mergers and Acquisitions. *The Quarterly Review of Economics and Finance*, 55, 1-19. <https://doi.org/10.1016/j.qref.2014.08.004>
- Brown, P., Beekes, W., & Verhoeven, P. (2011). Corporate Governance, Accounting and Finance: A Review: Accounting and Finance. *Accounting & Finance*, 51, 96-172. <https://doi.org/10.1111/j.1467-629X.2010.00385.x>
- Callen, J. L., & Fang, X. (2013). Institutional Investor Stability and Crash Risk: Monitoring versus Short-Termism? *Journal of Banking & Finance*, 37, 3047-3063. <https://doi.org/10.1016/j.jbankfin.2013.02.018>
- Cashman, G. D., Gillan, S. L., & Jun, C. (2012). Going Overboard? On Busy Directors and Firm Value. *Journal of Banking & Finance*, 36, 26. <https://doi.org/10.1016/j.jbankfin.2012.07.003>
- Chakravarty, S., & Rutherford, L. G. (2017). Do Busy Directors Influence the Cost of Debt? An Examination through the Lens of Takeover Vulnerability. *Journal of Corporate Finance*, 43, 429-443. <https://doi.org/10.1016/j.jcorpfin.2017.02.001>
- Chaudhary, P. (2021). Agency Costs, Board Structure and Institutional Investors: Case of India. *Asian Journal of Accounting Research*. <https://doi.org/10.1108/AJAR-12-2020-0130>
- Chen, X., & Yur-Austin, J. (2007). Re-Measuring Agency Costs: The Effectiveness of Blockholders. *The Quarterly Review of Economics and Finance*, 47, 588-601. <https://doi.org/10.1016/j.qref.2007.09.003>
- Cheng, S. (2008). Board Size and the Variability of Corporate Performance. *Journal of Financial Economics*, 87, 157-176. <https://doi.org/10.1016/j.jfineco.2006.10.006>
- Chiranga, N., & Chiwira, O. (2014). Impact of Multiple Directorships on Performance for Companies Listed on the Johannesburg Stock Exchange (JSE). *Economic World*, 2, 10.
- Clements, C., Neill, J. D., & Wertheim, P. (2015). Multiple Directorships, Industry Relatedness, and Corporate Governance Effectiveness. *Corporate Governance*, 15, 590-606. <https://doi.org/10.1108/CG-05-2014-0060>
- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does One Size Fit All? *Journal of Financial Economics*, 87, 42. <https://doi.org/10.1016/j.jfineco.2006.08.008>
- Connelly, J. T., Limpaphayom, P., Nguyen, H. T., & Tran, T. D. (2017). A Tale of Two Cities: Economic Development, Corporate Governance and Firm Value in Vietnam. *Research in International Business and Finance*, 42, 102-123. <https://doi.org/10.1016/j.ribaf.2017.04.002>
- Corvino, A., Doni, F., & Bianchi Martini, S. (2020). Corporate Governance, Integrated Reporting and Environmental Disclosure: Evidence from the South African Context. *Sustainability*, 12, 4820. <https://doi.org/10.3390/su12124820>
- Dang, A. R., Houanti, L., Le, N. T., & Vu, M.-C. (2018). Does Corporate Governance Influence Firm Performance? Quantile Regression Evidence from a Transactional Economy. *Applied Economics Letters*, 25, 984-988. <https://doi.org/10.1080/13504851.2017.1390309>

- Davis, O. (2019). *The Next Shareholder Revolution* (p. 15). Trans National Institute.
- DePamphilis, D. M. (2012). Chapter 3. The Corporate Takeover Market: Common Takeover Tactics, Antitakeover Defenses, and Corporate Governance. In D. M. DePamphilis (Ed.), *Mergers, Acquisitions, and Other Restructuring Activities* (6th ed., pp. 91-131). Academic Press. <https://doi.org/10.1016/B978-0-12-385485-8.00003-7>
- Elyasiani, E., & Zhang, L. (2015). Bank Holding Company Performance, Risk, and “Busy” Board of Directors. *Journal of Banking & Finance*, *60*, 239-251. <https://doi.org/10.1016/j.jbankfin.2015.08.022>
- Elyasiani, E., Jia, J., & Mao, C. X. (2010). Institutional Ownership Stability and the Cost of Debt. *Journal of Financial Markets*, *13*, 475-500. <https://doi.org/10.1016/j.finmar.2010.05.001>
- Falato, A., Kadyrzhanova, D., & Lel, U. (2014). Distracted Directors: Does Board Busyness Hurt Shareholder Value? *Journal of Financial Economics*, *113*, 404-426. <https://doi.org/10.1016/j.jfineco.2014.05.005>
- Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *The Journal of Political Economy*, *88*, 288-307. <https://doi.org/10.1086/260866>
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *The Journal of Law and Economics*, *26*, 301-325. <https://doi.org/10.1086/467037>
- Ferris, S. P., & Jayaraman, N. (2018). Better Directors or Distracted Directors? An International Analysis of Busy Boards. *Global Finance Journal*, *44*, 63. <https://doi.org/10.1016/j.gfj.2018.05.006>
- Fich, E. M., & Shivdasani, A. (2006). Are Busy Boards Effective Monitors? *The Journal of Finance*, *61*, 689-724. <https://doi.org/10.1111/j.1540-6261.2006.00852.x>
- Florackis, C. (2008). Agency Costs and Corporate Governance Mechanisms: Evidence for UK Firms. *International Journal of Managerial Finance*, *4*, 37-59. <https://doi.org/10.1108/17439130810837375>
- Gachie, W., & Govender, D. W. (2017). Innovation Policy and Governance in the African Region. *International Business & Economics Research Journal (IBER)*, *16*, 119-130. <https://doi.org/10.19030/iber.v16i2.9926>
- García Martín, C. J., & Herrero, B. (2018). Boards of Directors: Composition and Effects on the Performance of the Firm. *Economic Research-Ekonomiska Istraživanja*, *31*, 1015-1041. <https://doi.org/10.1080/1331677X.2018.1436454>
- Gherghina, Ş. C. (2021). Corporate Finance. *Journal of Risk and Financial Management*, *14*, 44. <https://doi.org/10.3390/jrfm14020044>
- Granado-Peiró, N., & López-Gracia, J. (2017). Corporate Governance and Capital Structure: A Spanish Study: Corporate Governance and Capital Structure. *European Management Review*, *14*, 33-45. <https://doi.org/10.1111/emre.12088>
- Gull, A. A., Nekhili, M., Chtioui, T., & Nagati, H. (2018). Beyond Gender Diversity: How Specific Attributes of Female Directors Affect Earning Management. *British Accounting Review*, *50*, 53. <https://doi.org/10.1016/j.bar.2017.09.001>
- Hamad, S., Draz, M. U., & Lai, F.-W. (2020). The Impact of Corporate Governance and Sustainability Reporting on Integrated Reporting: A Conceptual Framework. *SAGE Open*, *10*, 215824402092743. <https://doi.org/10.1177/2158244020927431>
- Harber, M. (2017). The Role of Institutional Investors in Promoting Long-Term Value Creation: A South African Perspective. *African Review of Economics and Finance*, *9*, 20.
- Harris, I. C., & Shimizu, K. (2004). Too Busy To Serve? An Examination of the Influence of Overboarded Directors. *Journal of Management Studies*, *41*, 775-798.

- <https://doi.org/10.1111/j.1467-6486.2004.00453.x>
- Henry, D. (2010). Agency Costs, Ownership Structure and Corporate Governance Compliance: A Private Contracting Perspective. *Pacific-Basin Finance Journal*, 18, 24-46. <https://doi.org/10.1016/j.pacfin.2009.05.004>
- Hewa Wellalage, N. (2011). Women on Board, Firm Financial Performance and Agency Costs. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1904072>
- Hong, H. A., Kim, J.-B., & Welker, M. (2017). Divergence of Cash Flow and Voting Rights, Opacity, and Stock Price Crash Risk: International Evidence: Divergence of Cash Flow Rights from Voting Rights. *Journal of Accounting Research*, 55, 1167-1212. <https://doi.org/10.1111/1475-679X.12185>
- Hutchinson, M., & Gul, F. (2004). Investment Opportunity Set, Corporate Governance Practices and Firm Performance. *Journal of Corporate Finance*, 10, 595-614. [https://doi.org/10.1016/S0929-1199\(03\)00022-1](https://doi.org/10.1016/S0929-1199(03)00022-1)
- Huu Nguyen, A., Thuy Doan, D., & Ha Nguyen, L. (2020). Corporate Governance and Agency Cost: Empirical Evidence from Vietnam. *Journal of Risk and Financial Management*, 13, 103. <https://doi.org/10.3390/jrfm13050103>
- Jensen, C., & Meckling, H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jurkus, A. F., Park, J. C., & Woodard, L. S. (2011). Women in Top Management and Agency Costs. *Journal of Business Research*, 64, 24. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1085109# <https://doi.org/10.1016/j.jbusres.2009.12.010>
- Khaya, S. (2020). *KHAYA SITHOLE: Where Are the Female CEOs? Clearly Not at JSE-Listed Companies*. BusinessLIVE. <https://www.businesslive.co.za/bd/opinion/columnists/2020-08-20-khaya-sithole-where-are-the-female-ceos-clearly-not-at-jse-listed-companies>
- Kieschnick, R., & Moussawi, R. (2018). Firm Age, Corporate Governance, and Capital Structure Choices. *Journal of Corporate Finance*, 48, 597-614. <https://doi.org/10.1016/j.jcorpfin.2017.12.011>
- Kim, H.-D., Kim, Y., Mantecon, T., & Song, K. (2019). Short-Term Institutional Investors and Agency Costs of Debt. *Journal of Business Research*, 95, 195-210. <https://doi.org/10.1016/j.jbusres.2018.10.019>
- Kostyuk, A., & Barros, V. (2018). Corporate Governance and Company Performance: Exploring the Challenging Issues. *Corporate Governance and Organizational Behavior Review*, 2, 25-31. https://doi.org/10.22495/cgobr_v2_i2_p3
- Larcker, D. F., McCall, A. L., & Ormazabal, G. (2015). Outsourcing Shareholder Voting to Proxy Advisory Firms. *The Journal of Law and Economics*, 58, 173-204. <https://doi.org/10.1086/682910>
- Lee, G. (2020). Chinese Firms Ahead of Curve in Gender Diversity: Grant Thornton Survey. *South China Morning Post*. <https://www.scmp.com/business/china-business/article/3065265/chinese-companies-ahead-curve-gender-diversity-grant>
- Majoni, A. (2019). *Mitigating Secondary Agency Problems: Examining the Impact of Share Option Compensation for Non-Executive Directors on CEO Pay Incentives and Earnings Management*.
- Manconi, A., Massa, M., & Yasuda, A. (2012). The Role of Institutional Investors in Propagating the Crisis of 2007-2008. *Journal of Financial Economics*, 104, 491-518.

- <https://doi.org/10.1016/j.jfineco.2011.05.011>
- Mans-Kemp, N., Viviers, S., & Collins, S. (2018). Exploring the Causes and Consequences of Director Overboardedness in an Emerging Market. *International Journal of Disclosure and Governance*, 15, 210-220. <https://doi.org/10.1057/s41310-018-0048-9>
- Martina, H. (2016). The Comprehensive Business Case for Sustainability. *Harvard News Review*, 12. <https://doi.org/10.1002/nba.30194>
- Meyer, E., & de Wet, Jh. (2013). The Impact of Board Structure on the Financial Performance of Listed South African Companies. *Corporate Board Role Duties and Composition*, 9, 18-31. <https://doi.org/10.22495/cbv9i3art2>
- Moez, D. (2018). Agency Costs, Corporate Governance and the Nature of Controlling Shareholders: Evidence from French Listed Firms. *International Journal of Accounting and Financial Reporting*, 8, 256-277. <https://doi.org/10.5296/ijaf.v8i3.13621>
- Muniandy, P., Tanewski, G., & Johl, S. K. (2016). Institutional Investors in Australia: Do They Play a Homogenous Monitoring Role? *Pacific-Basin Finance Journal*, 40, 266-288. <https://doi.org/10.1016/j.pacfin.2016.01.001>
- Natsesan, P., & du Plessis, P. (2018). *Institute of Directors in South Africa (IoDSA)*. Institute of Directors in South Africa (IoDSA). <http://www.iodsa.co.za>
- Nguyen, T. T. M., Evans, E., & Lu, M. (2017). Independent Directors, Ownership Concentration and Firm Performance in Listed Companies: Evidence from Vietnam. *Pacific Accounting Review*, 29, 204-226. <https://doi.org/10.1108/PAR-07-2016-0070>
- Norli, Ø., Ostergaard, C., & Schindele, I. (2015). Liquidity and Shareholder Activism. *The Review of Financial Studies*, 28, 53. <https://doi.org/10.1093/rfs/hhu070>
- Pandey, A., Sehgal, S., & Mittal, A. (2019). Board Busyness and Firm Performance: Evidence from India. *Theoretical Economics Letters*, 9, 453-476. <https://doi.org/10.4236/tel.2019.93032>
- Papadopoulos, K., & Mishra, S. (2019, February 24). *Corporate Governance in Emerging Markets*. The Harvard Law School Forum on Corporate Governance. <https://corpgov.law.harvard.edu/2019/02/24/corporate-governance-in-emerging-markets-3>
- Park, J.-H., Lee, J., & Choi, Y.-S. (2019). The Effects of Divergence between Cash Flow and Voting Rights on the Relevance of Fair Disclosure and Credit Ratings. *Sustainability*, 11, 3657. <https://doi.org/10.3390/su11133657>
- Porta, R. L., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency Problems and Dividend Policies around the World. *The Journal of Finance*, 55, 33. <https://doi.org/10.1111/0022-1082.00199>
- Post, C., & Byron, K. (2015). Women on Boards and Firm Financial Performance: A Meta-Analysis. *Academy of Management Journal*, 58, 1546-1571. <https://doi.org/10.5465/amj.2013.0319>
- Pozen, R. C. (2015). The Role of Institutional Investors in Curbing Corporate Short-Termism. *Financial Analysts Journal*, 71, 10-12. <https://doi.org/10.2469/faj.v71.n5.5>
- Price, N. J. (2018, June 8). *Board Size Matters: How a Smaller Board Can Be More Effective/Diligent*. Diligent Insights. <https://insights.diligent.com/board-composition/why-your-board-size-matters-how-a-smaller-board-can-be-more-effective>
- Rajoo, Y. (2020, December 15). *King IV on Director Independence*. PPM Attorneys. <https://www.ppmattorneys.co.za/king-iv-on-director-independence>
- Razzaq, A., & Niazi, G. S. K. (2018). Value Boosters or Dampers? Insights of Corporate Governance Practices From Pakistan. *Global Social Sciences Review*, 3, 207-236.

- [https://doi.org/10.31703/gssr.2018\(III-III\).13](https://doi.org/10.31703/gssr.2018(III-III).13)
- Rouyer, E. (2016). Family Ownership and Busy Boards: Impact on Performance. *Management Decision*, 54, 832-853. <https://doi.org/10.1108/MD-04-2015-0144>
- Saini, N., & Singhania, M. (2018). Corporate Governance, Globalization and Firm Performance in Emerging Economies: Evidence from India. *International Journal of Productivity and Performance Management*, 67, 1310-1333. <https://doi.org/10.1108/IJPPM-04-2017-0091>
- Schwartz, F. (2020). Women in Management (Quick Take). *Catalyst*. <https://www.catalyst.org/research/women-in-management/>
- Singh, M., & Davidson III, W. N. (2003). Agency Costs, Ownership Structure and Corporate Governance Mechanisms. *Journal of Banking & Finance*, 27, 793-816. [https://doi.org/10.1016/S0378-4266\(01\)00260-6](https://doi.org/10.1016/S0378-4266(01)00260-6)
- Stych, A. (2021). Percentage of Women CEOs Rises during Challenging Year—Bizwomen. *The Business Journals*. <https://www.bizjournals.com/bizwomen/news/latest-news/2021/01/percentage-of-women-ceos-rises-during-challenging.html?page=all>
- Sun, J., Liu, G., & Lan, G. (2011). Does Female Directorship on Independent Audit Committees Constrain Earnings Management? *Journal of Business Ethics*, 99, 369-382. <https://doi.org/10.1007/s10551-010-0657-0>
- Suzuki, Y., & Tho To, A. (2019). The Change in Board Independence in the Presence of Firm Risk and Regulation. *Contaduría y Administración*, 64, 139. <https://doi.org/10.22201/fca.24488410e.2020.2233>
- Taylor, C. (2019, November 13). Britain's Top 100 Firms Have Just 6 Female CEOs and Have "Some Way to Go" on Equality. *CNBC*. <https://www.cnn.com/2019/11/13/britains-top-100-companies-have-just-6-female-ceo-s-study-finds.html>
- Tham, Y. H., Sultana, N., Singh, H., & Taplin, R. (2019). Busy Boards and Earnings Management—An Australian Perspective. *Asian Review of Accounting*, 27, 464-486. <https://doi.org/10.1108/ARA-08-2018-0149>
- Uadiale, O. M. (2010). The Impact of Board Structure on Corporate Financial Performance in Nigeria. *International Journal of Business and Management*, 5, 12. <https://doi.org/10.5539/ijbm.v5n10p155>
- Uğurlu, M. (2000). Agency Costs and Corporate Control Devices in the Turkish Manufacturing Industry. *Journal of Economic Studies*, 27, 566-599. <https://doi.org/10.1108/EUM000000005382>
- Ullah, S., Akhtar, P., & Zaefarian, G. (2018). Dealing with Endogeneity Bias: The Generalized Method of Moments (GMM) for Panel Data. *Industrial Marketing Management*, 71, 69-78. <https://doi.org/10.1016/j.indmarman.2017.11.010>
- Vijayakumaran, R. (2019). Agency Costs, Ownership, and Internal Governance Mechanisms: Evidence from Chinese Listed Companies. *Asian Economic and Financial Review*, 9, 133-154. <https://doi.org/10.18488/journal.aefr.2019.91.133.154>
- Wang, C., Deng, X., Álvarez-Otero, S., Sial, M. S., Comite, U., Cherian, J., & Oláh, J. (2021). Impact of Women and Independent Directors on Corporate Social Responsibility and Financial Performance: Empirical Evidence from an Emerging Economy. *Sustainability*, 13, 6053. <https://doi.org/10.3390/su13116053>
- Wang, G. Y. (2010). The Impacts of Free Cash Flows and Agency Costs on Firm Performance. *Journal of Service Science and Management*, 3, 408-418. <https://doi.org/10.4236/jssm.2010.34047>

- Wellalage, N. H., & Locke, S. (2013). Women on Board, Firm Financial Performance and Agency Costs. *Asian Journal of Business Ethics*, 2, 113-127.
<https://doi.org/10.1007/s13520-012-0020-x>
- Yusoff, W. F. W., & Alhaji, I. A. (2012). *Corporate Governance and Firm Performance of Listed Companies in Malaysia* (p. 23).
- Zakaria, Z., Purhanudin, N., Pin, C. T., & Soon, W. C. K. (2016). Leverage and Agency Cost: Malaysian Construction Listed Companies. *International Journal of Management Research & Review*, 6, 7.
- Zhang, Q. (2016). *Corporate Governance, Institutional Investors and Firm Performance: A Comparative Study of South Africa and China*. Doctor of Philosophy.
<https://scholar.sun.ac.za>