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Assessing the Efficacy of Financial Management, External Audit Quality on Financial Performance with Interplay of Board of Trustees Vigilance in Public Sector Universities of Pakistan

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Keywords:
Financial Management, External Audit Quality, Board of Trustees vigilance, Financial Performance

ABSTRACT

Countries across the board, stakeholders at all levels give more attention, effort, and money to public sector performance assessment and evaluation. Pakistan's higher education sector is among one which faces multi challenges including financial performance due to limited research in this area. Employing quantitative research approach, this study used cross sectional research design with both the primary and secondary source for data collection using survey and financial report. The study employed a sample of 108 universities from population of public sector universities in Pakistan and used stratified random sampling technique. Ordinary Least Squares (OLS) Regression was exercised to assess the research hypothesis. The study only considers public sector universities, inclusion of private universities may enable researchers to study more in depth and compare the results of each category. Income statement and balance sheet ratios using panel data may be used for more accurate and reliable measurement in future studies. This study seeks to enhance understanding of the relationship of financial management, external audit quality, board of trustees vigilance and financial performance. The study has theoretical and practical implications in the field of management, accounting, and finance which can enhance the financial performance.

INTRODUCTION

In this global arena, countries devote more attention, effort, and money to public sector performance management than ever before (Pollitt & Bouckaert, 2017). At all levels of government, including municipal, regional, national, and international, the focus is on results-based management. Educational institutions, local government bodies, administrative agencies, non-governmental organizations, and other international organizations such as the World Bank produce statistics and information on performance results and their impact (Thiel & Leeuw, 2002).

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Various scholars Bekhet et al. (2020) define financial performance as calculating the monetary results of a company's policies and operations. Because of its significance on organizational health and ultimate survival, financial performance has attracted tremendous attention and has been a primary issue for various stakeholders in all companies (Egbunike & Okerekeoti, 2018). As a result, its assessment and establishing factors have gotten more interest in the business and corporate finance literature, particularly in developing countries (Charles et al., 2018).

Tran and Vu (2018) employed a quantitative methodology to investigate the factors influencing financial performance and found that financial management is more significant factor among them. Haddad, (2022) study concluded that external audit quality significantly affect the financial performance of conventional banks while improved the financial performance of Islamic Banks with a moderated impact. Moreover, Mishra and Kapil (2017) found a positive influence on a firm's financial performance also influence by facilitating effective monitoring and curbing managerial opportunism. In their study on the impact of board structure on corporate performance, Martín and Herrero (2018) examine various factors like board size, independence, diversity, gender, experience, age, and nationality of board members, and their influence on the firm's success. Bevins et al. (2020) claim that boards with higher diversity in specialized fields shows a greater tendency for successful judgement and conclusion. The existence of diversity in subject area expertise is of high importance in enabling successful decision making in the fields such as risk management, investment planning and financial management needs further exploration. Nevertheless, some regulations that are typically applicable to institutions are often not followed when it comes to boards. Bevins et al. (2020) also highlighted that transparent and systematic process of member nominations, clear expectations from board members, board education criteria and their continuous assessments are among few these regulations. Therefore, these factors contribute to effective board vigilance and may affect financial performance in higher education institutions, however, there is limited research to explain this relationship empirically. The author’s looking forward to assume the opportunity to explore and recognize the factor of board vigilance that may moderate the relationship between financial management, external audit quality and financial performance, thereby adding to the current body of literature in this area in higher education sector in Pakistan.

Financial Performance

The higher education institutions (HEIs) are widely recognized as significant drivers of socioeconomic development, exerting a positive influence on national economy and individual as well (Volchik et al., 2018). The financial performance of the University exemplifies the organization's financial status during a designated timeframe and is the outcome of multiple managerial decisions made on a regular basis (Azzahra & Wibowo, 2019). Türegün (2022) posits that financial performance pertains to the evaluation of a company's financial condition using various approaches of financial analysis, hence providing insights into the company's operational effectiveness over a period of time. The selection of suitable ratios for evaluating financial performance is contingent upon the specific attributes of the entities under investigation and the objectives of the study (Le Thi Kim et al., 2021). In modern era universities are practicing diverse performance assessment approaches at organizational and individual level. These systems are sometimes used in ceremonial and symbolic manners to show their validity. The research undertaken at the internal level exposes varying views towards the use of performance measurement and reporting for external accountability reasons, attended by a degree of resistance (Dobija et al., 2019).

Accordingly, the significance of performance measurement has intensified within the context of higher education institutions. In this regard, the support of university accounting system reform is facilitating the implementation of this novel pattern (Di Carlo et al., 2019). The subject of financial performance (FP) in public sector organizations has grown significant attention from policymakers, public officials, and academics due to the execution of New Public Management (NPM) reforms and the occurrence of austerity measures in the public sector. New Public Management (NPM) highlights the need of minimizing resource management and encouraging efficiency and effectiveness in public institutions (Goeminne & George, 2019). Financial ratios are frequently utilized in the area of financial research owing to their clarity and enriched informational significance in both public and private sectors, including universities. These ratios enable trend analysis, cross-sectional analysis, and comparative analysis of the changes in a firm's financial position over a period of time. Financial ratios are generally used and ideal techniques in financial analysis due to their potential to serve as input data for complicated mathematical models (Myšková & Hájek, 2017).

Financial Management and Financial Performance

Financial management consists of the activities of budgeting, planning, and regulating the financial resources to ensure financial success of the organization (Mutya & Josephine, 2018). The financial management system is a crucial feature in safeguarding institutional stability and promoting growth, facilitating the revolution of the educational system and mitigating poverty and unemployment (Adedokun & Ağa, 2023). Irawan et al. (2021) emphasize that effective financial management and adequate funding are essential determinants that can enhance the financial performance and facilitate execution of higher education management objectives in alignment with national standards. The influence of financial management on staff salary, institutional competitiveness and financial performance, and the quality of higher education inside universities is of considerable implication (Xuan, 2022). In their study on the Higher Education Law in Vietnam, Luong and Nang (2022) found and demonstrate advocating that the implementation of this law has resulted in improved autonomy for universities, particularly in the jurisdiction of financial management to exercise sensible and efficient utilization of the state funds. Financial management has a noteworthy role in shaping the track of higher education innovation and the boost of quality. The appearance of this marvel is observed through diverse indicators, encompassing the ability to independently opt for loans in financial markets and determine plans for generating revenue, such as tuition fees, teaching contracts, research contracts, and other forms of income and overall strengthen the financial performance.

The fundamental factor in ensuring the progression of education and research for a nation's economic progress lies in the implementation of more efficient financial management practices (Kasradze et al., 2019). In order to effectively adapt, update, and enhance operational practices, it is imperative for university financial management to follow contemporary trends, continuous shifts in economic development, and the succeeding condition of affairs. According to Xia and Du (2019) the management system employed in the institution is well-suited to its specific qualities, hence maintaining a stable internal control system across all departments and sections for enhanced financial performance.

Budgetary analysis and financial performance

According to Schick (2018) the implementation of performance budgeting has led to the expansion of efforts sought at enhancing productivity, augmenting expenditure control, and improving financial management and financial performance within the public sector. Allen (2021) claims that the allocation of government resources associates with the needs of the performance budgeting system in terms of contemplating outcomes and financial performance. According to the Ruffner and Sevilla (2004) this particular budgeting system is depicted as a framework that confirms a connection between allocation of funds and quantifiable results pertaining to financial performance.

Goeminne and George (2019) found that performance is greatly influenced by the budget and previous year financial performance. Research studies also explored the correlation between performance results and budget allocation on the basis of policy type (Greitens & Joaquin, 2010). Budgetary analysis plays a vital role in facilitating company to assess their financial performance, determine possible areas for enrichment, and make well-read outcomes for the future. Numerous scholarly investigations have been conducted to explore the correlation between budgetary participation and financial performance. However, a notable research void remains in examining the association between budgetary analysis and financial performance, particularly in the moderating influence of board of trustees vigilance.

Management Accounting and Financial Performance

Management accounting is a systematic procedure that involves the identification, assessment, evaluation, interpretation, and communication of information with the purpose of aiding organizational management. According to Ahid and Augustine (2012), Ameen et al. (2018), Lesi Hertati et al. (2020) management accounting is a process that facilitates the provision of both financial and nonfinancial information to the management of an organization, with the aim of aiding in the decision-making process. The utilization of management accounting enables management to enhance decision-making processes pertaining to resource allocation, expenditure management, and performance evaluation (Gunasekaran et al., 2015; Hansen et al., 2021).

The establishment of accountability for performance is facilitated by the utilization of accounting systems and reporting, which are commonly recognized as valuable instruments rather than ultimate objectives (Barrett, 2022).The alignment between the Performance Management System and the mission, vision, and objectives of an organization has been acknowledged by Johnson et al. (2008). Consequently, the design of the Performance Management System can have an impact on management Accounting Practices, as top-management may prioritize the adoption of management accounting techniques that facilitate the achievement of established goals, as highlighted by (Moses et al., 2019).

The utilization of Management Accounting Practices (MAP) aids management in various aspects such as strategic planning, monitoring the execution of strategies, and implementing corrective actions. Consequently, management accountants can effectively employ MAP to monitor and evaluate the progress made towards the attainment of desired goals. The study search for and scrutinize the association between financial management, and financial performance based upon the conceptual framework. Therefore, the following hypotheses was formulated:

H1: *There is significant relationship between financial management and financial performance.*

External Audit Quality and Financial Performance

Audit quality pertains to an auditor's capacity to identify inaccuracies and their readiness to disclose any inaccuracies discovered during an audit procedure without bias or apprehension

(Mohamed & Habib, 2013). The central objective of the audit process is to offer an impartial confirmation of the financial statements prepared by management and to improve the overall standard of financial reporting (Ben-Hassoun et al., 2018; Khalil & Ozkan, 2016; Sarhan et al., 2019). According to Masood and Afzal (2016) it is essential for all public sector entities to ensure the efficient and effective consumption of public expenditures. According to El-Dyasty (2018) the involvement of prominent audit firms that have international associations and a clear commitment to upholding the severe audit standards established by the International Auditing and Assurance Standards Board (IAASB) is expected to improve the accuracy and reliability of the information released by publicly traded firms. Türegün (2022) performed a study to examine the relationship between audit firm span and audit quality. Their findings indicate that there is no significant improvement in audit quality when audit firm tenure is limited, and the advantages of obligatory firm rotation are minor.

In their study Cheng et al. (2013) found a positive association between auditor quality and both audit firm size and performance. In addition, the size of auditors has a greater impact on the performance of Public Listed Companies with Audit Market Frictions (PCAMFs) compared to Non-Public Listed Companies with Audit Market Frictions (NCAMFs). Moreover, Sayyar et al. (2015) revealed a lack of substantial correlation between audit quality indicators, specifically audit firm rotation , audit fees and return on assets (ROA). The research also discovered a notable and positive correlation between audit fees and Tobin's Q. Nevertheless, there is a lack of meaningful correlation between audit firm rotation and Tobin's Q. The quality of external audit is subjected to various factors such as comply with International Auditing Standards, independence and competence required in financial, performance and compliance audit. In this regard, the following hypotheses is formulated:

H2: *There is significant relationship between external audit quality and financial performance.*

Board of Trustees Vigilance and Financial Performance

The significance of board of trustees at institutions of higher education has increased in recent years due to the intensifying complexity of the business and the need for real governance (Tjahjadi et al., 2021). The concept of board vigilance, pertains to the capacity of the board to supervise the performances of the institution to ensure devotion to legal and ethical norms, is an area of significance. The inspection of the efficacy of different corporate governance structures has been annoyed by the enduring presence of business gossips and collapses (Ntim, 2015). Conversely, the findings of the studies demonstrate inconsistent and uncertain outcomes. Serveral studies explained that corporate governance factors such as board diversity, size, independence and composition have a positive impact on performance (Khan & Abdul Subhan, 2019; Lozano et al., 2016; Riyadh et al., 2019; Schmidt & Fahlenbrach, 2017). Several research have examined the link between the variables under research. Afrifa and Tauringana (2015), Malik and Makhdoom (2016), O'Connell and Cramer (2010) and have achieved evidence supporting a negative relationship. In contrary Chabachib et al. (2019), Ferrer and Banderlipe (2012), Ghazali (2010), Guest, (2009) have described no significant relationship between the variables. Furthermore, it is worth noting that a significant proportion of the existing research focuses on developed countries, which limits its generalizability to other nations due to variations in cultural norms and corporate governance frameworks (Arora & Sharma, 2016; Fernando et al., 2017).

Tsukioka (2018) revealed a notable enhancement in both profitability and the quality of corporate governance. The board of directors shows an important role in control management's actions to enhance shareholder value within the context of a control and monitoring system (Jebran & Chen, 2023). The knowledge and performance of a board of directors play vital roles in influencing the financial performance of an organization (Baldacchino et al., 2020; Gambo et al., 2019). However, the current research on the relationship between board expertise, board performance, and financial performance in the higher education sector is nominal.

Board Expertise and Financial Performance

Board expertise is an essential aspect of maintaining board vigilance, since it is requirement for board members to possess the basic knowledge and experience to effectively supervise the activities of the institution. Within the jurisdiction of higher education, numerous scholarly studies have been conducted to investigate the correlation between board expertise and the overall success of educational institutions. Sarwar et al. (2018) conducted a study that produced comparable results, indicating that board members acquiring financial expertise in accounting and financial practices shown superior capabilities in monitoring and critically evaluating the organization's activities. Consequently, this indicated to improved governance and financial conclusions. This finding establishes that within the higher education sector, possessing board experience is a crucial factor in influencing board engagement and successively enhance financial results.

Board Performance and Financial Performance

In light of the recent financial emergencies faced by several companies, there is a growing obligation to enhance the accountability and ability of the board of directors in fulfilling its responsibilities (Epstein et al., 2002; Gabrielsson et al., 2007; Kiel & Nicholson, 2005). According to Kiel and Nicholson (2005) the evaluation of board performance furnishes boards with a means to proactively recognize areas of concern prior to their rise, thereby playing a critical role in veering the collapse of an organization. According to Kiel and Nicholson (2005) the implementation of regular board assessments is regarded as a mechanism for enhancing accountability, defining duties more clearly, and improving the efficiency of board activities. Several studies have suggested that the balanced scorecard, comprising four dimensions namely stakeholders, financial, learning and growth and internal processes are recommended for evaluating the performance of the board (Chan, 2006; Epstein et al., 2002; Grembergen & Haes, 2005; Northcott & Smith, 2011; Seal, 2006).

Aly and Mansour (2017) assert that the assessment of board performance has undergone significant changes, becoming a mandatory obligation for companies listed on several stock exchange platforms. According to principle No. 8 of the Australian Stock Exchange's (ASX) 2003 publication on corporate governance best practices, it is imperative to regularly evaluate the performance of the board. Improving governance and complying with regulatory requirements, which are statutory for publicly traded companies across several international stock markets, necessitates more prominence on evaluating board performance. According to Aly and Mansour (2017) the importance of the board's effectiveness is crucial in determining both board alertness and financial performance.

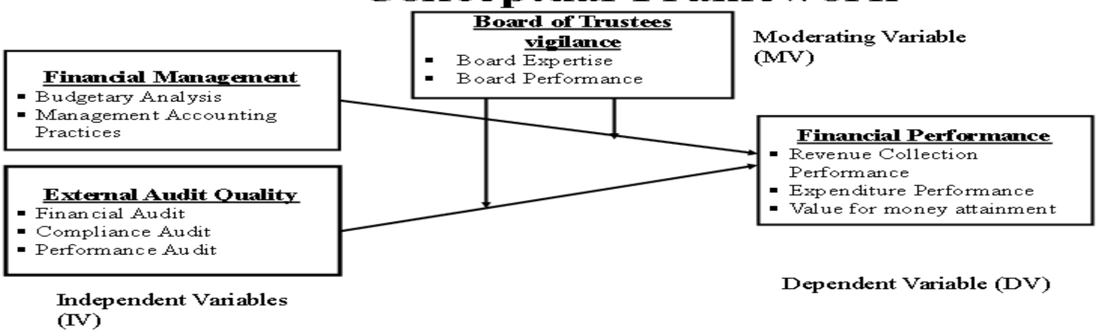
Based on existing academic literature, it is well realized that the performance of the board plays a key role in effectively administration the activities of an institution. Therefore, the following hypotheses are formulated:

H3: *There is significant relationship between board of trustees vigilance and financial performance.*

H4: *Board of trustees vigilance moderate the relationship between financial management and financial performance.*

H5: *Board of trustees vigilance moderate the relationship between external audit quality and financial performance.*

Conceptual Framework



Source: Author developed

METHODOLOGY

The study is quantitative research and used a Survey method on a Likert scale, with value varying from 1 (strongly agree) to 5 (strongly disagree).

Population of the study comprises all public Sector Universities/HEIs is Pakistan. Sample size on the basis of "Sekaran & Bougies, (2010) Sample size determination Table" is determined n=108 while using Yamane's (1987) formula "n=N/1+N(e)2 , the sample was calculated as n=105, and stratified random sampling technique was used for sample selection.

Measures

The conceptual dimensions of financial performance was adopted from Ewama (2003) and measured with index of three ratios i.e revenue performance ratio (budgeted/actual), expenditure performance ratio (budgeted/actual), and value for money ratio (actual revenue/actual expense).The research encompassed the evaluation of specific predictor variables, namely financial management and external audit quality, as well as the investigation of a moderating variable, board of trustees vigilance. The items were evaluated utilizing a 5-point Likert Scale, where participants provided responses ranging from 1 (representing strong agreement) to 5 (representing strong disagreement). The instrument comprised a comprehensive set of 39 items that encompassed the necessary variables. Indicators and composite reliability were assessed using loadings of 0.7 or above. After a meticulous process of selecting appropriate scales, the researcher proceeded to engage in talks with experts in the domains of research and financial management over the questionnaires. Cronbach's alpha is a commonly utilized measure for evaluating internal consistency, which is widely accepted and implemented in scholarly investigations. After eliminating two items, the Cronbach alpha coefficient for the 37 items surpassed the minimum threshold of 0.70. The components of the questionnaire were derived from multiple sources which were checked for exploratory factor analysis to identify the fundamental aspects and refine the question set. The study employed confirmatory factor analysis and construct validity methodologies to establish the fundamental variables. The variance explained in the rotated component matrix surpasses 0.50, indicating that the factor loading of the measure has strong validity features.

ANALYSIS

Multiple Regression and Hypotheses Testing

The study's hypotheses were examined through the utilization of multiple regression analysis. The objective of this study is to scrutinize the association between the independent and dependent variables. Sufficient and appropriate number of samples is required for doing regression analysis is required for such type of study (Hair et al., 2021). For multiple regression analysis the assumptions such as that the data should be normal, linear and do not have multicollinear and homoscedastic which are commonly assessed when analyzing regression standardized residuals were observed.

The researchers did a thorough analysis of the underlying assumptions and determined that none of them were violated in the study. This finding provides evidence for the viability of performing a multiple regression analysis.

Direct Relationship

Table 1. Regression results for direct relationship

Model	Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value	Hypothesis testing
	Beta	std. Error	Beta			
(Constant)	0.619	0.034		18.224	0.000	
Financial Management	0.027	0.011	0.114	2.369	0.020	Supported
External Audit Quality	0.176	0.012	0.792	15.054	0.000	Supported
Board of Trustees Vigilance	0.024	0.012	0.099	2.096	0.039	Supported
R Square	0.838	Adjusted R Square		0.830		
Prob.	0.000					
F-Stats	3.814					

Dependent Variable: Financial Performance

H1: There is significant relationship between financial management and financial performance.

The outcome for the association between financial management and financial performance is significant at (β = 0.114, t =2.369, p =0.020), therefore, the hypothesis is proved that there is significant relationship between financial management and financial performance.

H2: There is significant relationship between external audit quality and financial performance.

The outcome for the association between external audit quality and financial performance is significant at (β = 0.792, t =15.054, p =0.000), therefore, the hypothesis is proved that there is significant relationship between external audit quality and financial performance.

H3: There is significant relationship between board of trustees vigilance and financial performance.

The outcome for the association between external audit quality and financial performance is significant at (β =0.099, t=2.096, p=0.039), therefore, the hypothesis is proved that there is significant relationship between board of trustees vigilance and financial performance.

Moderating Effects

The vigilance of the board of trustees plays a moderating role in the relationship between financial management and financial performance, as well as between external audit quality and financial performance. According to Brendea (2014) it is anticipated that the moderating variable will enhance the association between the predictor factors and the criterion variable, hence maximizing its effectiveness. This relationship is seen below.

Table 2. Regression results of indirect relationship

Model	Unstandardized Coefficients		Standardized Coefficients	t-stat	p-value	Hypothesis testing
	Beta	Std. Error	Beta			
(Constant)	0.591	0.080		7.363	0.000	
Financial Management	0.114	0.033	0.481	3.450	0.001	Supported
External Audit Quality	0.103	0.028	0.467	3.656	0.000	Supported
FM* BOT	0.026	0.010	0.485	2.619	0.010	Supported
EAQ* BOT	0.023	0.009	0.485	2.668	0.009	Supported
R Square	0.843	Adjusted R Square	0.835			
Prob.	0.000					
F-Stats	107.652					

Dependent Variable: Financial Performance

H4: Board of trustees vigilance moderates the relationship between financial management and financial performance.

The outcome for regression analysis shows that interaction of financial management and board of trustees vigilance has significantly positive impact on financial performance (β = 0.485, t= 2.619, p=0.010), therefore, the hypothesis is proved that board of trustees vigilance moderates the relationship between financial management and financial performance.

H5: Board of trustees vigilance moderates the relationship between external audit quality and financial performance.

The outcome for regression analysis shows that interaction of external audit quality and board of trustees vigilance has significantly positive impact on financial performance (β = 0.485, t=2.668, p=0.009), therefore, the hypothesis is proved that board of trustees vigilance moderate the relationship between external audit quality and financial performance.

DISCUSSION

There is an increasing collective interest among diverse stakeholders, encompassing government agencies, donors, parents, and members of society, to investigate the tangible outcomes of their tax payments. How can one public office have a higher level of performance relative to another, despite both offices having equal access to the available resources? These frequently voiced inquiries encourage further investigation into the potential impact of financial management, external auditors, and board vigilance on the financial performance of public sector universities in Pakistan. The present study examined the aforementioned inquiries by utilizing extant literature on public financial management, which suggests that the individual occupying a position of authority significantly impacts performance outcomes (Meier & O'Toole, 2002).

The role of financial management is crucial in achieving enhanced outcomes for organizations. This study provides evidence that the financial performance of public sector universities in Pakistan is highly impacted by financial management practices, such as budgetary analysis and the adoption of management accounting practices. The skilled individual consistently creates and utilizes reports on budget deviations, actively analyses the causes of any variances that affect performance and implements actions to prevent their recurrence in future occurrences. The utilization of management accounting information plays a crucial role in the operational control of diverse operations and the evaluation of performance, enabling the assessment of the effectiveness of programmes, sections, and departments. The results of the regression analysis carried out on financial management, and financial performance are consistent with previous studies (Erhard et al., 2003; Holtz & Sarlo Neto, 2014; Kaawaase et al., 2021; Usman & Kibiya, 2021).

According to the Article 170(2) of Constitution of the Islamic Republic of Pakistan, all government departments, including public sector universities, are required to undergo external audit from Auditor General of Pakistan as a compulsory responsibility. The requirement for this condition is clearly described in the Act of the Higher Education Commission and the Public Sector Universities of the each provinces and the Federal Capital. The review results specify that government auditors show compliance with quality control procedures, identify and judge the potential risks linked to considerable misrepresentation arising from fraudulent practices, and device suitable measures to handle occurrence of fraud throughout the auditing process. The auditors are responsible for warranting adherence to laws and regulations, as well as properly communicating any observed deficiencies in internal control to the workforce accountable for governance and management during the audit process. The results presented in this study show that government auditors are responsible for evaluating the financial and non-financial use of resources and significantly impact financial performance which confirm the results of previously similar studies (Al-ahdal & Hashim, 2022; Haddad, 2022; Idogho & Daniel, 2021; Rahman et al., 2019). Government auditors play a central role in helping directness and accountability within the public sector through their careful documentation and reporting of instances of authority breaks, which are assisted by strong and well-founded evidence. This conclusion suggests that public sector institutions that possess vigorous administrative competences are effectively utilizing resources to progress their performance. This study highlights the significance of the board of trustees vigilance involvement, point out its crucial role in achieving audit objectives and enhancing the financial performance of public sector universities in Pakistan. The current result is consistent with the research conducted by Mukhibad et al. (2022) which proved that the financial and accounting education of board members can result in greater disclosure practices, improved performance efficiency, and a subsequent decline in information asymmetry. The research assumed by Kankanamage (2016), Aifuwa and Embele (2019) produced results that reveal a statistically significant and positive correlation between board expertise and both the quality of financial reporting and the success of the organization. The effectiveness of an organization remains dependent upon the board of trustees attentiveness. The efficiency of the organization is accomplished by the board of trustees, who contribute the required human resources to fulfil the organization's requirements, promote self-sufficiency, and improve the skills of the workforce through training and employee maintenance. The achievements were acquired as a result of the strategic choices taken by senior executives and the backing received from the board of directors.

CONCLUSION

The study's conclusions indicate that the success of public sector universities in Pakistan is influenced by financial management practices, board of trustees vigilance and external audit quality. Hence, it is prudent to prioritize the key financial management practices and establish effective mechanisms to confirm their ongoing implementation and operation inside organizations. In addition, it is imperative for the government to take into account the board of trustees alertness to the dimensions of board expertise and board performance when making policy choices regarding board structure. This is because a capable and efficient board is well prepared to supervise the activities and performance of organizations, including public sector universities.

This study boosts the current academic literature by merging previous research on the effects of board of trustees vigilance on financial management with the literature on the association between external audit quality and financial performance results. This research augments to the current academic literature by showing the possible influence of better management systems and board oversight on the effectiveness of managerial functions, hence improving the connection between managerial performance and organizational results. The conclusions of this research have the potential to encourage scholars in the discipline of public budgeting and finance, inspiring them to integrate managerial facets into their examination of the influence of financial resources and board of trustees direction on organizational excellence, efficiency, and performance.

The research results show that the performance and knowledge of the board of trustees have a valuable influence on external audit quality, financial management practices and financial performance in public sector universities. Moreover, the ability of board members to recognize financial indicators of distress in universities and other institutions of higher education is a crucial factor to examine when assessing board effectiveness.

Limitations and recommendations

This study only concentrated on public sector universities of Pakistan. It is recommended that further research studies may be conducted in the context of both public and private degree awarding institutions. Further recommended to utilize income statement and balance sheet ratios as a method for evaluating financial performance, as these metrics provide improved precision and dependability.

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