### A STUDY TO ANALYSE ACCOUNTING FOR STOCK-BASED COMPENSATION PLANS

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#### ABSTRACT

This research takes a statistical look at how a cross-section of publicly listed corporations record their stock-based compensation programs. Academics evaluate how FASB as well as IFRS 2 may affect financial measures and reported costs. The overall fair value of the stock options granted, the reported compensation expenditures, and the variations in earnings per share (EPS) are key factors. Researchers examine the association between fair value measuring approaches and the reported variability of compensation expenditures using regression analysis. Our research shows that when comparing enterprises using different valuation approaches, those using option pricing models like Black-Scholes had far higher reported expenditures. Increases in compensation costs may have an effect on how profitable a company seems to be, as researchers find a statistically significant negative correlation between EPS and stock-based compensation expenditures. Our analysis also includes a correlation between investor responses as seen in stock price volatility and the quality of transparency about stock-based remuneration. According to the research, stock prices stabilise when investors feel less uncertainty as a result of improved disclosure standards. In sum, the findings of this study highlight the need of clear reporting standards and strong valuation methods in the context of accounting for stock-based remuneration. Accounting frameworks and stakeholder confidence in financial reporting are two areas that stand to benefit from the insights gathered.

Keywords: Stock based compensation, Accounting standards, FASB, IFRS, EPS.

## **INTRODUCTION**

A growing trend in contemporary corporate pay strategies is the use of stock-based compensation programs to bring together employee and shareholder interests. In addition to encouraging workers to stay there, these programs also give them a stake in the company's success, which should boost productivity. To be sure, businesses

and others who rely on financial statements have their hands full with the complexities of stock-based compensation accounting (Ermel & Medeiros, 2019).

With an eye towards the rules established by the Financial Accounting Standards Board (FASB) and the International Financial Reporting Standards (IFRS), this research intends to dissect the accounting practices and consequences of stock-based compensation programs. The way in which stock-based compensation is recognised, measured, and disclosed in financial statements is impacted by these rules as they change over time. Stock options, limited supply units, performance shares, and other forms of stock-based compensation will be the focus of this research, which will also analyse their accounting treatment and the methods used to establish fair value (Araujo Ermel & Medeiros, 2020).

Along with that, the study was showing how stock-based pay affects financial measures and general corporate governance. The research aims to provide light on how these compensation schemes influence investor views and decision-making by analysing the disclosures associated with them. In order to create transparency and preserve stakeholder confidence, organisations must grasp the financial ramifications and legal obligations of accounting for compensation based on stocks as they negotiate the complexity of this practice. In the end, our research will add to the larger conversation about corporate governance and financial reporting by highlighting the need of transparent and uniform accounting methods that fairly represent the monetary aspects of stock-based remuneration. Our hope is that accounting researchers, practitioners, and regulators will find useful suggestions in our study (Mohri, 2021).

## **BACKGROUND OF THE STUDY**

As a powerful tool for motivating and keeping people, stock-based remuneration has become more prominent in corporate America and all through the world. These plans were first created to help employees and shareholders work together, but now they also provide workers a chance to profit from how well the business does, which promotes a culture that shared success (Nathanson et al., 2021). The tech boom and competitive labour markets in the late 20th century prompted corporations to explore novel methods to recruit top people, and one of those approaches was to increase dependence on stock-based pay. The benefits of stock-based compensation programs don't negate the complexity and special accounting issues that come with them. When it came to reporting these costs, many businesses were inconsistent until official accounting rules were issued. The absence of consistency led authorities to set down explicit rules with the goal of improving financial statement comparability and openness (Palmer, 2024).

To regulate the accounting for stock-based remuneration, FASB as well as the International Accounting Standards Board (IASB) have established complex frameworks. Crucial in this regard are FASB Statement No. 123 as well as IFRS 2, which mandate that businesses record the fair worth of equity awards, such as stock

options, as an expenditure in the income statement (Enache & Kim, 2020). This was a big departure from when most corporations only included stock-based compensation information in the financial report's footnotes. The timing of expenditure recognition, the impact on financial indicators like profits per share, and calculating the fair value of options for stocks are just a few of the obstacles that businesses must overcome as they adapt to new accounting requirements. As stakeholders look more closely at how firms pay their staff, the effect of stock-based remuneration on corporate governance as well as investor views is significant (Galustian, 2024).

Financial reporting, governance of companies, as well as stakeholder trust are all affected by stock-based compensation schemes, and this research intends to investigate these effects further by looking at the accounting procedures that surround these programs. In doing so, it hopes to shed light on the changing terrain of stock-based compensation accounting.

### PURPOSE OF THE STUDY

The objective of this research is to examine how stock-based compensation schemes' accounting procedures stack up against the most recent requirements from FASB and IFRS. The intricacies of these compensation plans, including expenditure recognition and fair value assessment, are meant to be investigated. In order to improve financial statement openness and comparability, the research aims to analyse the effects of stock-based remuneration on reporting of finances, corporate governance, as well as investor views. The report's ultimate goal is to provide suggestions for better accounting standards and more confidence in corporate compensation schemes among stakeholders.

## LITERATURE REVIEW

Due to their increasing significance in corporate governance as well as financial reporting, stock-based compensation programs have been the target of rigorous regulatory and academic examination of their accounting practices. Important research emphasises the need of correct accounting in order to represent the real economic effect of stock options as a tool for aligning incentive programs with shareholder interests (Steward, 2022). This study paved the way for further investigations into the effects of fair value assessment on financial statements and related topics. An important turning point in the handling of stock-based remuneration came with the change from the prior accounting system to FASB. Previously reported exclusively in the footnotes, this standard now requires corporations to disclose the fair value of stock options as a cost. Following this, researchers looked at how the change impacted corporations' financial statements and found that, on average, reported costs went up and profits per share went down. As a result of this shift, academics dug further into fair value assessment approaches,

with many calling for stronger models that take market circumstances and volatility into consideration (Bushman, 2021).

Examining how stock-based pay impacts corporate governance is another important part of the research. When CEOs have stock options when the possibility for large profits is low and the danger of loss is great, they may take unnecessary risks. This discovery highlights the need of meticulously planning and documenting compensation arrangements to reduce the likelihood of unforeseen outcomes. There has also been an examination of stock-based remuneration from a worldwide viewpoint, with an emphasis on IFRS 2 (Sun & Wei, 2023). Companies record compensation expenditures in significantly different ways according to US GAAP and IFRS, as the researchers show in their examples of recognition as well as measurement variances. Foreign investors that depend on clear and reliable financial data may feel the effects of this difference. Accurately valuing stock-based remuneration continues to be a difficulty, even with the progress in accounting rules. In order to help investors better comprehend the situation, researchers stress the necessity of more transparent disclosures and the significance of constantly improving assessment tools (Lovett et al., 2022).

Finally, research shows that financial transparency, corporate governance, and accounting for stock-based pay all work hand in hand. Addressing the issues and refining standards in accounting for these complicated compensation systems requires continual study, as this sector continues to expand.

# **RESEARCH QUESTION**

1. When using the present accounting rules to measure and report stock-based compensation, what are the main obstacles that corporations encounter?

### RESEARCH METHODOLOGY

The researcher used a convenient sampling technique in this research.

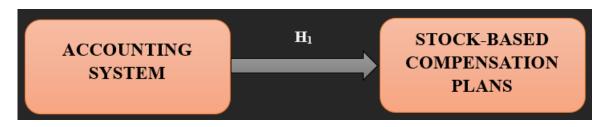
Research design: Quantitative data analysis was conducted using SPSS version 25. The combination of the odds ratio and the 95% confidence interval provided information about the nature and trajectory of this statistical association. The p-value was set at less than 0.05 as the statistical significance level. The data was analysed descriptively to provide a comprehensive understanding of its core characteristics. Quantitative approaches are characterised by their dependence on computing tools for data processing and their use of mathematical, arithmetic, or statistical analyses to objectively assess replies to surveys, polls, or questionnaires.

**Sampling:** A convenient sampling technique was applied for the study. The research relied on questionnaires to gather its data. The Rao-soft program determined a sample size of 1627. A total of 1800 questionnaires were distributed; 1743 were returned, and 43 were excluded due to incompleteness. In the end, 1700 questionnaires were used for the research.

Data and Measurement: A questionnaire survey served as the main data collector for the study. There were two sections to the survey: (A) General demographic information and (B) Online & non-online channel factor replies on a 5-point Likert scale. Secondary data was gathered from a variety of sources, with an emphasis on online databases.

**Statistical Tools:** Descriptive analysis was used to grasp the fundamental character of the data. The researcher applied ANOVA for the analysis of the data.

#### CONCEPTUAL FRAMEWORK



### **RESULTS**

# Factor Analysis:

Factor Analysis (FA) is often used to validate the underlying component structure of a collection of measurement items. The scores of the observed variables are thought to be impacted by latent factors that are not readily observable. The methodology of accuracy analysis (FA) is a method that relies on models. This research primarily focuses on constructing causal pathways that link observable events, underlying causes, and measurement errors.

The suitability of the data for factor analysis may be evaluated using the Kaiser-Meyer-Olkin (KMO) Method. The sufficiency of the sample for each variable in the model, as well as for the model as a whole, is evaluated. The statistics measure the magnitude of potential shared variation among many variables. Data that has smaller percentages is often more appropriate for factor analysis.

KMO generates random integers within the range of zero to one. A sample is considered sufficient if the Kaiser-Meyer-Olkin (KMO) value is between 0.8 and 1.

It is necessary to take remedial action if the KMO is less than 0.6, which indicates that the sampling is inadequate. Use your best discretion; some authors use 0.5 as this, therefore the range is 0.5 to 0.6.

• If the KMO is close to 0, it means that the partial correlations are large compared to the overall correlations. Component analysis is severely hindered by large correlations, to restate.

"Kaiser's cutoffs for acceptability are as follows:

A dismal 0.050 to 0.059.

• 0.60 - 0.69 below-average

Typical range for a middle grade: 0.70-0.79.

Having a quality point value between 0.80 and 0.89.

The range from 0.90 to 1.00 is stunning."

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test <sup>a</sup>						
Kaiser-Meyer-Olkin Measure	.971					
Bartlett's Test of Sphericity	Approx. Chi-Square	6850.175				
	đf	190				
	Sig.	.000				
a. Based on correlations						

The overall significance of the correlation matrices was further confirmed by using Bartlett's Test of Sphericity. A value of .971 is the Kaiser-Meyer-Olkin sampling adequacy. By using Bartlett's sphericity test, researchers found a p-value of 0.00. A significant test result from Bartlett's sphericity test demonstrated that the correlation matrix is not a correlation matrix.

## **Test for Hypothesis**

# Dependent Variable:

# • Stock-Based Compensation Plans

Employees may get stock in the firm or the opportunity to buy stock as a component of their pay via stock-based compensation programs. By providing financial incentives for workers to boost the company's performance and expansion, these programs hope to bring workers' and shareholders' interests into harmony. Options, performance shares, and restricted stock units (RSUs) are common types of stock. Motivating and retaining employees is easier with stock-based remuneration since it

gives them a piece of the company's success. Costs associated with these programs must be recorded and disclosed in financial statements in accordance with certain accounting rules (Barenbaum & Schubert, 2019).

## Independent Variable:

## Accounting System

Organisations gather, document, process, as well as report financial data using accounting systems, which are organised frameworks. Accurate financial reporting and the management of financial transactions are the goals of this set of processes, procedures, and technologies. Financial statements, diaries, and ledgers are all part of this system, as are software programs that automate data input and analysis. Among an accounting system's core functions is the facilitation of effective internal controls, the maintenance of regulatory compliance, the provision of relevant and timely financial data to stakeholders, and the support of decision-making. Increased operational efficiency and clear financial reporting are two benefits of a well-planned accounting system (Liu & Zhang, 2021).

# Relationship Between Accounting System and Stock-Based Compensation Plans

To ensure precise financial reporting and compliance, it is essential to understand the interaction between accounting systems as well as stock-based compensation arrangements. For financial statements to effectively represent the expenditure of stock-based compensation in compliance with applicable accounting standards (such as FASB and IFRS), an efficient accounting system must be able to accurately manage and record its fair value. Stock options as well as different equity awards may be valued with the use of accounting systems (Li et al., 2020), which allow corporations to recognise these expenses as they happen. This has an effect on important financial measures like profits per share in addition to the income statement. Management may evaluate the effect of stock-based remuneration on performance and retention with the help of crucial data provided by reliable accounting systems. Organisations may increase confidence in financial reporting, transparency, and compliance by including compensation based on stock calculations into the broader framework of financial management. The efficiency of an accounting system has a direct impact on the reporting and management of stock-based remuneration (Asyik, 2021).

Based on the above discussion, the researcher formulated the following hypothesis, which was to analyse the relationship between Accounting System and Stock-Based Compensation Plans.

"H01: There is no significant relationship between Accounting System and Stock-Based Compensation Plans."

"H1: There is a significant relationship between Accounting System and Stock-Based Compensation Plans."

Table 2: H1 ANOVA Test

ANOVA							
Sum							
	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	99674.830	1031	5978.486	4095.837	.000		
Within Groups	1092.936	668	4.597				
Total	100767.766	1699					

In this study, the result is significant. The value of F is 4095.837, which reaches significance with a p-value of .000 (which is less than the .05 alpha level). This means the "H1: There is a significant relationship between Accounting System and Stock-Based Compensation Plans." is accepted and the null hypothesis is rejected.

### **DISCUSSION**

Implications for company governance and financial reporting are highlighted by the examination of stock-based compensation plan accounting. To effectively record and measure the fair value of various pay arrangements, which impacts financial statements and KPIs like profits per share, effective accounting processes are crucial. Complying with ever-changing regulatory norms and the intricacy of valuation methodologies are two obstacles. Organisational performance may also be enhanced when staff incentives are in line with shareholder interests. So that stakeholders may make educated choices with trustworthy financial data, it is critical to do ongoing research to improve transparency and accounting processes.

### CONCLUSION

In order to promote openness and responsibility in financial reporting, this research highlights the vital significance of strong accounting standards for stock-based compensation programs. Companies may affect stakeholder perceptions as well as corporate governance by accurately measuring and reporting compensation expenditures in accordance with recognised standards like FASB as well as IFRS. There has to be constant development in accounting systems because of the difficulties in fair value disclosure and evaluation. To maintain trust and encourage informed decision-making, good accounting standards are crucial, especially as organisations depend more and more on stock-based pay to align staff interests with shareholder value.

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