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# Nexus of Employee Stock Ownership with Cost of Capital: Evidence from KSE 100

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**ABSTRACT**

This study investigates the effect of employee stock ownership on a company's cost of capital. It takes employees into great consideration and tries to overcome the agency conflict that exists within the company by adopting the employee's stock ownership plan. The panel data regression is run in order to find out the effect of employee stock ownership on a company's cost of capital. This study hypothesizes that employee stock ownership will tend to reduce the company's cost of capital, due to a decrease in the cost of equity and debt cost of the corporations. From KSE 100 companies were chosen for our research analysis, the study employs a sample size of 209 companies. 11 years of data were collected (2010-2020), a panel data regression was run due to cross sectional and time-series data. The research showed that there is a substantial impact of employees' stock ownership on the company's cost of capital, equity cost, and company's debt cost, and a negative relationship exists between the independent and dependent variables. Employee stock ownership increases the company's cost of debt, equity cost and capital cost decreases. The research involves employee stock ownership as the variable because there are few research works yet been conducted especially in Pakistan. It also contributes towards the bond found between ESO and agency cost that how it helps to minimize the cost and benefits to the company and shareholders. This study offers a contribution towards the literature concerning ESO and the company's capital cost. It is useful for the companies, as this shows that adopting the employee's stock ownership plan reduces the company's capital cost, cost of debt, and equity as a whole, and most importantly the principal-agent conflict is minimized. The financial companies are fully ignored which may represent different results and may vary according to the sectors as well. The given effect can also be checked by taking stock prices as the dependent variable.



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## 1. Introduction

Employee Stock Ownership is where the employees of a company tend to hold the shares of the company in which they are operating. It is a share option plan by the employer for employees as a means of employee benefit. ESOP are entitled to being chosen as providing the employees with monetary benefits which tend to improve the employee's performance, as they are linked with other stakeholders specially the Shareholders of the company, this connection is an indication of a complex relationship between each other which lately leads to disputes and disagreements. As agency theory tells us about the relationship between the principals (who are the shareholders of the company) and agents (who are the employees of the company) As the both Principal and Agents have different goals and interests, the Agents are motivated to work in line with their goals and interests which contradict with the interests and goals of the principals. Therefore, to overcome this conflict many companies are now often opting ESOP as corporate finance strategy to minimize the moral hazard and the agency problem, which will lead to focus on the interests by the employees with their shareholders (Aubert, Kern, & Hollandts, 2017; Campa & Kern, 2020; vanov & Zaima, 2011). Hence, ESOP are a part of companies plan to let focus the employees on the corporate performance and appreciation in the share prices of the stock.

The employee stock ownership leads towards the direct impact in creation of worth for the companies having the greater impact on shareholding pattern of employee (Garfatta & Zorgati, 2021).

Hence the agency conflict reflects on the company's share prices which eventually is due to the company's cost of capital. As the agency cost such the monitoring cost is added in the company's cost of capital which eventually reflects the price of shares. Different scholars claims that ESO can reduce the agency cost as the participants of ESO line their interests with the principals (shareholders) and work for the benefit of company in all means (Barney, 1990a, 1990b).

Vast amount of studies has been conducted on ESO and firm's performance but a small amount of studies has been done regarding the effect of ESO and the company's cost of capital. The agency problem is seen in many companies and there have been disputes among the shareholders and employees and the agency cost has been added as an extra cost to cost of capital. Therefore, to overcome agency conflict and benefit from lower cost Employee Stock Ownership adoption tend to solve the problem of corporate finance. Hence, this relationship influences to conduct this study to check the overall link of ESO on cost of capital.

The means of this research is to check the consequence of ESO on the company's cost of capital. As ESO is becoming common now a days and is used to overcome the agency problem conflict in the company. The main objective is to check that does ESO reduces the Company's cost of Capital. As the company's high cost of debt leads to high financial risk by giving out ESO it gives a chance to reduce the debt cost and it enhances the employees' motivation level which increases the company's worth. It's also our objective to check the effect of ESO on company's performance which is linked towards to decrease the overall cost for the company's capital.

## 1.1. Research Objectives

- To determine the relationship of ESO on the company's cost of equity.
- To determine the relationship of ESO on the company's cost of debt.
- To determine the relationship of ESO on the company's cost of capital.

## 1.2 Significance of study

This research study primarily reflects a foundation for the management of Pakistan's companies at the time of deciding Employee Stock Option Plans. It also identifies the impact of Employee Stock Option Plans on company's cost of capital including cost of equity and cost of debt. It considers different mechanisms and views to the ESOP also encourage managers to involve their employees in the life of the business by granting them company shares. It provides the guidelines to managers to mitigate possible management entrenchment and dilution in property rights related to ESO to reduce the concerns of equity investors.

## 1.3 Research Contribution/Novelty

This study contributes to the literature by providing the empirical evidence on the relationship between ESO and cost of capital by employing a longitudinal analysis that investigate the ESO against the theoretical premise of agency theory something that was predominately neglected by the earlier studies and has not yet examined by ancestors in context of KSE-100 companies. Thereby to protrude nuanced understanding of this novel and unprecedented data, this study thoroughly bridges this research gap and contributes practically and theoretically to the existing literature on Employee Stock Ownership and cost of capital. The findings of this research will contribute to the cost of capital literature and have implications for firms that decide to engage in ESOP plans.

## 1.4 Scope of the study

The Scope of the study is bound to the Firms listed on Pakistan Stock Exchange, the Karachi Stock Exchange. As no research is been found in Pakistan regarding the effect of ESO on Cost of capital. Therefore, by taking Companies from KSE100 my research is fulfilling the Gap which is identified, to look upon the outcome the employee stock ownership will have on the company's' cost of capital in the developing country Pakistan.

# 2. Literature Review

## 2.1 Employee Stock Ownership

Employee ownership is a technique that emphasizes on giving employees shares in the business. This is a compensation and motivational technique that is used by the companies to align the needs of workers and shareholders. Many countries include tax enticement to encourage employee ownership. We have found as previously as well the positive and the negative impacts of implementing the ESO. From the positive side perspective, we have seen that due to Employees Stock Ownership employees get motivated and leads to organizational efficiency, however from the drawback perspective it can be seen that management the employees tend to feel more superior and familiar; entrenchment and it also effects the shareholders' value. Many researchers has concluded that ESO tends to have a positive consequence towards the behavior of the employees as they feel the motivation of being recognized and get a sense of belonging and satisfaction and get committed towards the company's benefits and growth. (Gamble, Culpepper, & Blubaugh, 2002; D. L. Kruse, Blasi, & Freeman, 2012). They are more driven, happier, and have lower rates of turnover and absenteeism. As a result of increased efficiency and cost reduction, this usually leads to improvement in firm performance.

Furthermore, the employee stock ownership leads towards the direct impact in creation of worth for the companies having the greater impact on shareholding pattern of employee (Garfatta & Zorgati, 2021). Employee stock ownership has an influence on firms' success because it is a tool for companies to inspire employees, improve efficiency, and attract talent. It looks at a variety of studies based on the influence of the employee stock ownership has on the productivity level of the company, as it tends to increase and enhance the profitability of the business(D. Kruse, 2002).

Employee ownership is seen as a "stabilizing power" which helps to boost efficiency and ensures a company's long-term sustainability in this section of the literature (Blair, Kruse, & Blasi, 2000). Moreover, summarizes the empirical literature's findings, claiming that employee stock ownership has a positive impact or no impact at all (D. Kruse, 2002).

However, other studies which were done on the employee stock ownership reflects on the "evil side" of employee ownership, or its detrimental impact on corporate governance. Upper team uses employee owned structures to place shares in "good hands" (Benartzi, Thaler, Utkus, & Sunstein, 2007). According to the argument, collusion between employer and employee owners is completely normal. Executives and staff are natural partners against buying attempts (Benartzi et al., 2007). Acquisitions and eventual mergers are often correlated with layoffs from the perspective of workers. ESO gives employers a voice which they use to avoid any layoffs and misjudge by the shareholders. It has been examined that the effects of employee ownership using dichotomous and continuous variables, showing that it has a negative impact (Faleye, Mehrotra, & Morck, 2005).

The employee stock ownership, having employees as a central focus, lead towards improved creative ideas and improvement in the performance of employees that contributing towards positive performance of organization (Wang, 2021).

Moreover recent research on the bond of employee ownership and company effectiveness appear to support such claims (Guedri & Hollandts, 2008). They also concluded that positive outcomes are very low in large corporations, where employee ownership is often enforced for nefarious motives such as "saving cash by substituting salaries with employee equity or creating a workplace coalition to foil takeover bids". We expect to see a non-straight line or you can say that no existence of direct bond between employee ownership and the company's equity cost after accounting for the two opposing consequences of employee ownership.

We use an organization structure to connect the jigsaw pieces on the employee ownership and the company's capital cost, given the contentious viewpoint on value creation. Previous researches attempts to model both the positive (resulting effects) and negative (centralization method) aspects of employee ownership (Aubert, Garnotel, Lapied, & Rousseau, 2014). They are unable to find a single answer. The solutions available are determined by the relative levels of managerial performance. They highlight that both positive and poor administrators are encouraged to use employee ownership as a centralization tool based on the measured data. Evidently, avoiding a choice (to enforce or improve staff ownership program) based solely on the discretion of managers is the key to address this type of issue. However, this model ignores the profit margin as a business indicator for internal agency disputes. "Contractual relationships are the lifeblood of a company, not only with workers but also with vendors, distributers, clients, creditors, and other stakeholders. For both of these contracts, the issue of agency expenses and oversight exists" concentrating on the manager-shareholder partnership According to Jensen & Meckling, shareholders have to make sure that managers interest are with the shareholders however if not it will be seen after sometime as managers will be seen working towards their goals and interests rather than the shareholders, in order to overcome this shareholders would need to conduct a cost such as the monitoring cost to look over every steps of the employees which in end will be present in the share prices(Jensen & Meckling, 1976). As a result, agency disputes would be expressed in stock price fluctuations and, as a result, the cost of equity. Employee ownership, can lead to reduced value because it serves as a bonding connection between the interests of both shareholders and employees (Ivanov & Zaima, 2011). claiming that the implementation of ESOPs by US companies between 1994 and 2008 had a detrimental effect on their cost of debt by decreasing the price of capital. According to the literature, employee ownership has both pros and cons on transaction cost: it lowers agency costs by increasing workers' motivation; while the drawback is that it can increase the agency costs by improving management internalization.

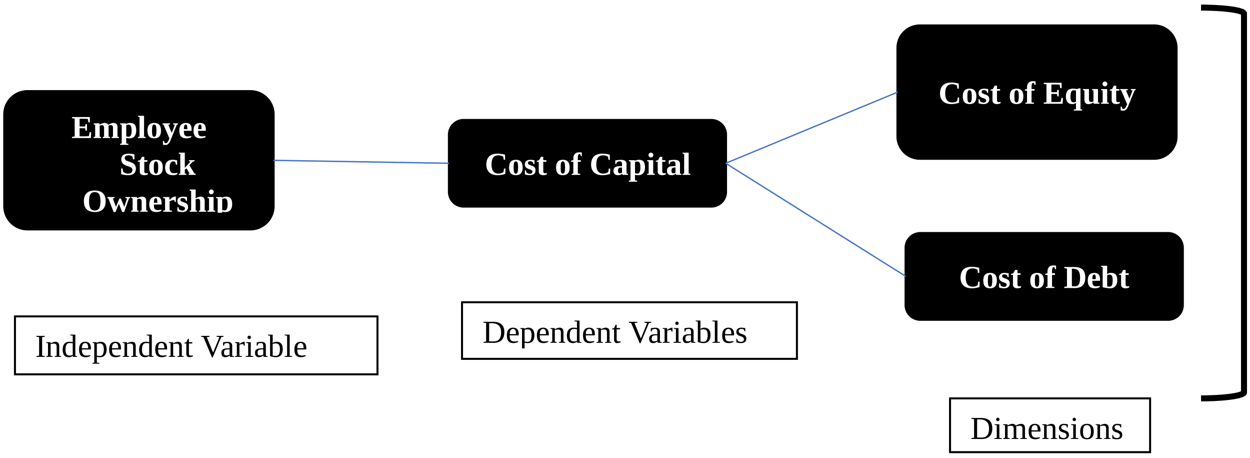
## 2.2 Employee Stock Ownership & Cost of Capital

Sharing Profit as an initiative to motivate employees is often seen as method to reduce the agency conflict, as well as reducing possible agency disputes and agency cost within the company. "When positive cash flow is tend to reduce or turned into negative, companies can minimize this effect on cashflow by reducing the size of incentives given to employees (Barney, 1990b). This change would be expressed in a lower debt cost in an efficient capital market". On a macroeconomic level, this view of shared capitalism in the form of ESO structures as a means of increasing employee compensation and giving them extra benefits is consistent with results, which claim that shared capitalism will reduce unemployment(Weitzman, 1986) .

The association the Employee Stock Ownership have on the capital cost of the corporation. It was conducted that ESO lowers capital cost of the company. They found no strong bond between cost of equity and ESO. However, an ESO effects the company's debt cost, as reducing the cost of debt leads to decrease in cost of capital. They also looked into the effect of adopting ESO during financial crisis and it was seen that there was a positive change in the company's cost. Moreover, the providers of external finance also feel safe to give finance as they affiliate ESO with low financial risk. This research encourages the managers to add the employees as shareholders as motivating them leads to solve the agency cost and lower cost of capital (Campa & Kern, 2020). The employee stock ownership (ESOP) decreases the conflict between company's stakeholders and ultimately lead towards lower cost of equity capital (Fu Cheng & Shanshan Ji, 2021).

## 3. Conceptual Framework

The Framework shows that Employee Stock Ownership is the Independent Variable of this study. And there is one dependent Variable the company's cost of capital, moreover in order to study cost of capital there are two dimensions which would be used to measure the cost of capital. The dimensions are cost of equity and cost of debt. In this viewpoint, our model is built to check the consequence that ESO has on the cost of capital. The Model of our research is taken from the article (Campa & Kern, 2020). As Employee Stock Ownership looking by the literature tells us that is a positive effect towards the agency problem and employees tend to feel secure and motivated towards their work which let to decrease the agency cost (Javed & Idris, 2018) and also decrease the cost of Capital of the company.




### 3.1 Hypothesis Development

H1: Employee Stock Ownership has a significant impact on company's Cost of Equity.
H2: Employee Stock Ownership has a significant impact on company's Cost of Debt.
H3: Employee Stock Ownership has a significant impact on company's Cost of Capital.

## 4. Methodology

### 4.1 Sample Size

Our study is time series study as we will be covering from the 2010 till 2020. The sample for the study has been gathered from the Pakistan Stock Exchange, the KSE 100 index, to gather the 11 years data for the variables the Bloomberg indexes was used. The data was collected by using the PSX website, the annual reports of the companies, and investing.com website. The research included the biggest corporations of Pakistan that's why KSE100 index was used as the largest 100 companies by the market cap, as the corporations market value and by the number of shares of Pakistan are listed.

A total of 19 companies were used as our sample size that are giving and opting the Employee Stock Ownership Plan. However, the number of the firms selected as the sample size is relatively small it is acceptable as it can be related to the previous study by on the cost/benefits of Employee Stock Ownership (Rosen et al., 1986). Also, the firms that are included in the sample are all quite large up to average of 7000 employees. Thus, our study includes over 20,000 individuals for our sample size.

## 4.2 Definition of Variables

**Table 1**
***Operational Definitions of the Construct***

| Construct | Operational Definition |
|---|---|
| Employee Stock Ownership | Employee Stock Ownership is in which a company's Employees own the shares of the company. They take the share through a share option plan given by the company. |
| Cost of Equity | Cost of Equity is the cost that company bears to giving out the equity, basically the shares it gives to shareholders, to compensate them for investing in the business company occurs this cost. |
| Cost of Debt | Cost of debt is the amount a company pays for its debt, such as for taking up the loan bonds. To take this debt an interest Is paid at a rate. |
| Cost of Capital | Cost of Capital, is the total cost of the company's capital. Which includes equity and debt cost of the company. |

**Table 2**
***Measurement Table***

| Variable | Variable Nature | Measurement | Reference |
|---|---|---|---|
| Employee Stock Ownership | Independent | number of shares employees hold in the company / Total number of shares of the company. | (Joseph Blasi et al., 1996); (Gamble, 2000); (Ginglinger et al., 2011) |
| Cost of Capital | Dependent | WACC(cost of debt * percentage of debt) + (cost of equity * percentage of Equity) * (1 – tax rate) | (Aubert et al., 2017), (Campa & Kern, 2020), (Ivanov & Zaima, 2011) |
| Cost of Debt | Dependent | (Long−term debt/ Total debt) *Treasury bond rate *Debt adjustment factor + (Short – term debt /total debt) * Average rate of Treasury note * debt adjustment factor * (1 – tax rate) | (Aubert et al., 2017), (Campa & Kern, 2020) |
| Cost of Equity | Dependent | CAPM<br>$Re = rf + \beta e \times (rm - rf)$ | (Aubert et al., 2017), (Campa & Kern, 2020), (Ivanov & Zaima, 2011) |

## 4.3 Independent Variables

The Independent Variable Employee Stock Ownership will be measured as how much percentage of the shares employees hold in relative to the total company's shares (Blasi, Conte, & Kruse, 1996).

*Formula: number of shares employees hold in the company / Total number of shares of the company.*

This information would be collected using company's statements; pension fund plans company's announcements etc.

## 4.4 Dependent Variables

The dependent variable Cost of Capital dimensions the cost of equity and cost of debt will be measured using Bloomberg both dimensions will be measured. Cost of Equity would be measured using the Capital asset pricing model (CAMP)
Formula:

$$Re = rf + \beta e \times (rm - rf)$$

rf is the risk-free rate which is the Pakistan Bond issues by State Bank of Pakistan. βe shows the adjusted beta which will be derived from adjusting the historical data. The benchmark used to calculate beta would be the KSE 100 index. And lastly this risk premium ((rm −rf) is noted as expected market return subtracted from risk free rate.

For measuring cost of debt, the following formula would be used:

(Long−term debt/ Total debt) *Treasury bond rate *Debt adjustment factor + (Short – term debt /total debt) * Average rate of Treasury note * debt adjustment factor * (1 – tax rate)

For the dependent variable Cost of Capital, WACC will be used to calculate the cost and measure this variable, the following formula will be used
(Cost of debt * percentage of debt) + (cost of equity * percentage of Equity) * (1 – tax rate).

# 5. Data Analysis
## 5.1 Descriptive Statistics

**Table 3**
***Descriptive Statistics***

| Variables | N | Mean | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| Cost of Equity | 197 | 2.24% | 5.64% | -12.56 % | 17.04% |
| Cost of Debt | 197 | 0.408% | 0.261% | -0.28% | 1.09 % |
| Cost of Capital | 197 | 1.27% | 3.06% | -6.77% | 9.31% |
| Employee Stock ownership | 197 | 4.096% | 3.380% | 0.00% | 11.56% |

The total Number of data which was analyzed were 197 (N =197) The Descriptive of the Variables were calculated in the SPSS, Through the Descriptive Statistics Command. The results show that the cost of equity mean is 2.24% and standard Deviation is 5.64%. The minimum cost of equity is -12.56 % and maximum us 17.04%. The mean score of cost of debt is 0.408% and standard Deviation is 0.261%, and the maximum and minimum score is 1.09 % and -0.28% respectively. This shows that equity cost is much higher than the cost of debt. Moreover, the mean of cost of capital is 1.27% and standard Deviation is 3.06%, the minimum is -6.77% and maximum are 9.31%. The mean score for Employees Stock Ownership is 4.096% this tells that on average up to 4.1% company shares are owned by the Employees in the company which are registered on the Pakistan Stock Exchange. The standard Deviation is 3.380% and minimum, maximum is 0.00% to 11.56% respectively.

Hence, overall findings indicates that cost of equity is high on average than the cost of debt and this is due to increasing cost of employee’s ownership in the company's stocks.

## 5.2 Multicollinearity

Multicollinearity is due to existence of high intercorrelations among the variables, that the variables are interlinked with each other. Due to this multicollinearity can lead to wrong and misleading results, multicollinearity problem needs to be resolved. More that due to this multicollinearity problem, the interpretation of how the each independent variables effect can lead to misjudged analysis and lead to have a wrong interpretation of the results rather than the actual results (Field, 2009). To identify the issue and existence of multicollinearity the degree of tolerance and the variance inflation factor is used, the problem exists of the following scenario happens that the value to be found of VIF is > 10 or = 10 , moreover towards the Tolerance value it must not be less than 0.1 (Pallant & Manual, 2007).

**Table 4**
***Multicollinearity Result Table***

| | Multicollinearity | |
|---|---|---|
| **Variable** | **VIF** | **Tolerance** |
| Cost of equity | 1.00 | 1.0000 |
| Cost of debt | 1.00 | 1.0000 |
| Cost of Capital | 1.00 | 1.0000 |

As we can see from the table 4 below the results of multicollinearity, the collinearity statistics shows that the Tolerance value is greater than 0.1 for all the variables and the VIF value is less than 10 for the variables, which leads to conclude that our data is reliable and no problem of multicollinearity exists.

## 5.3 Autocorrelation

The independence of the variables can be analyzed through the Durbin Watson test, this is the test which is used to check if there is any existence of autocorrelation in the residuals (D. Kruse & Blasi, 1997; Savin & White, 1977). Durbin Watson test was carried out in Stata. As we can see that Durbin Watson statistic for this analysis is 1.693756, we check the table of Durbin Watson and identified the upper and lower limit, the lower limit is 1.643 and upper limit is 1.704. This is the range found for our data set through the DW table, as to conclude that autocorrelation between residuals does not exists, therefore we need the value that is within our range. Hence, the value is in the given range, we can claim that residuals are independent and no autocorrelation exists in the data set.

**Table 5**
***Durbin Watson***

| | |
|---|---|
| Durbin Watson d Statistic | 1.693756 |

## 5.4 Homoscedasticity

Heteroscedasticity is when the difference between the error term or the residual term in the regression model varies. It is a problem because it is assumed that all the residuals which are drawn have a constant variance, which is Homoscedasticity. It means that the distribution of the data of the variables is same, the difference between the independent and dependent variables is constant. Hence, it shows that error terms are same for Homoscedasticity and variance homogeneity.(Hair, Ringle, & Sarstedt, 2011). Therefore, to check that our data is homogeneous we run the Breusch Pegan test in the Stata. The following Hypothesis would be checked for our test

$H_0$= Homoscedasticity is found in the data set
$H_1$= Heteroscedasticity is found in the data set

**Table 6**
***Breusch Pagan Test***

| | |
|---|---|
| Breusch Pagan test | 0.9439 |

As we can see from our test results the p value is 0.9439 which is greater the significance value 0.05, this leads to not reject our null Hypothesis and accepting it. It shows that there is Homoscedasticity in the data set.

## 5.5. Panel Data Regression

We can show the regression model in a form of equation, as for our analysis there is one independent variable and 3 dependent variables, we study the relationship among these variables. The equation for our model is as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

**Table 7**
**Panel Data Regression Results**

| Variables | Correlation | R square | P value | Results |
|---|---|---|---|---|
| Cost of Equity | -0.9819 | 0.0539 | 0.002 | Accepted |
| Cost of Debt | -0.9365 | 0.016 | 0.091 | Accepted |
| Cost of Capital | -0.0005 | 0.0702 | 0.00 | Accepted |

The research was tackled using the panel dataset in the Stata. The using of Panel Data gives not only the command to investigate dynamic relations but also gives us hold on unobserved cross section heterogeneity. As our research design includes cross sectional data from all the industries located in Pakistan Stock Exchange and moreover the data depicts the time series from (2010 to 2020), it is built up on the usage of panel data set, the sample collected all the Pakistan companies listed on PSX and over a data of 11 years were collected from 2010 till 2020. By using the Hausman test, first panel data was run using the cost of equity as dependent variable and employee stock ownership as the independent variable. As panel data results given are for both fixed effect and random effect. The Hypothesis for Hausman test is

$H_0$: $\beta 0 = 0$, there is no effect (Random Effect)
$H_1$: $\beta 0 \neq 0$, there is an influence (Fixed Effect)

As running our test, the Ho was rejected, and fixed effect of Hausman test was taken for the cost of equity and employee stock ownership. As we can see that a negative correlation was found (-0.9819) between the two variables, which means as ESO increases the Cost of Equity decreases. More the results are showing a 5.4% variation (R square = 0.0539) and the p value is smaller than 0.1 (0.002 < 0.1) leading to reject our 1st null Hypothesis of our model.

Therefore, it appears that there is a substantial impact of Employee Stock Ownership on the company's equity cost. Moving to our next panel data analysis for cost of debt and Employee Stock Ownership, the Ho was rejected and using the fixed effect these were the results as shown in the table, we can see that there is a negative relationship (-0.9365) between cost of debt and Employee Stock Ownership. It means as ESO increases the cost of debt decreases, they both move in opposite direction. We can see that cost of debt is showing 1.6% Variation (R square = 0.016) and as the P value is smaller than 0.1 (0.091< 0.1), there is a significance impact of employee's stock ownership on the cost of debt, leading to reject our 2nd null Hypothesis. It shows that presence of ESO reduces the cost of debt for the companies.

Lastly moving towards our last Hypothesis and model, the last panel data was run on using the cost of capital as dependent variable and employees stock ownership as independent variable, as the test led to reject HO, we used the fixed effect results. As we can see that in the table COC and ESO has a negative relationship (-0.0005), means as ESO increases the COC decreases. More we can see a 7.02% variation by cost of capital (R square = 0.0702) and we can see that the P value is smaller than 0.1 (0.00< 0.1) which leads to reject our 3rd and last null Hypothesis and claiming that there is a substantial impact of Employee Stock Ownership on the company's capital cost, therefore overall Cost of Capital decreases as ESO increases, thus leading to conclude that financial risk of the firms are minimized lowered by the implementation of ESOP.

**Table 8**
***Summary of Panel data Regression Analysis Hypothesis***

| | Hypothesis Accepted | Hypothesis Statement |
|---|---|---|
| Cost of Equity | Alternative Hypothesis | There is a substantial impact of Employee Stock Ownership on the company's equity cost. $p < 0.05$ |
| Cost of Debt | Alternative Hypothesis | There is a substantial impact of Employee Stock Ownership on the company's debt cost, $p < 0.1$ |
| Cost of Capital | Alternative Hypothesis | There is a substantial impact of Employee Stock Ownership on the company's capital cost, $p < 0.05$ |

## 5.6. Discussion

The results show that there is a substantial impact of Employee Stock Ownership on the company's equity cost, a substantial impact between cost of debt and Employee Stock Ownership and lastly a substantial impact of Employee Stock Ownership on the company's capital cost. As all these dependent variables are negatively correlated with ESO. Which leads to mean that as the Employee Stock Ownership in the company increases the cost of debt, cost of equity and as a whole cost of capital decreases. Our 1st Hypothesis was accepted that there is a substantial impact of Employee Stock Ownership on the company's equity cost. Thus, significantly cost of capital is lower after the adoption of ESO. It not only statistically results are significant but they are also economically significant to the shareholders of the company as when ESO increases it not only lowers the equity cost but it is a positive signal for the shareholders (Li, Sun, & Yu, 2019). It increases the prices of the stocks as it has been seen in the previous studies. However, previous studies portrays that cost of equity does not have a significant effect due to ESO as they say Employee stock ownership may cause management issues and combining them with dilution in property rights, might could affect the equity investors (Campa & Kern, 2020; Aubert et al., 2017). Increasing financial risk. However, many say that ESO is an advantage to overcome the principal agent conflict. As shown by previous studies that ESO has a significant effect on equity cost of the company as agency theory states the gap and different motives of the management and principal (Ivanov & Zaima, 2011). And the negative relationship of cost of equity and change in beta value is due to seen a rise in the share market prices as ESO is seen as a positive signal effect which leads to increase the share prices and incorporate the cost of equity. As due to ESO, given the chance to the employees to be part of the equal ownership it lines the goals of employees with the shareholders as now the employees are also the shareholders and gaining benefit from it thus reducing the agency conflict and the cost as no more monitoring cost of employees this leads to decrease the cost of equity. Moreover, as it is seen that giving employees an additional number of shares, it shows a positive sign as market tend to see it as a positive signaling effect leading to increase in share price as because it reduces the agency conflict.

Furthermore, results indicated that there is a substantial impact of Employee Stock Ownership on the company's liability cost. The cost of debt decreases with the implementation of ESO. As taking ESO as an initiative to increase its capital and funds. And not taking debt decreases the cost of debt as states that employees feel motivated and work for betterment of the company and work hard which increases the productivity of the company (Kim & Ouimet, 2014). Therefore, adopting the ESO instead of taking debt it lowers the leverage cost of the company as less debt to be paid in future, the companies get funds and do not need debt to overcome the shortage of funds and investment opportunities so lowering the leverage, these results are in line with our other research studies (Aubert et al., 2017; Campa & Kern, 2020; Ivanov & Zaima, 2011). Thus, when the company ESO increases the cost of debt decreases and also tax deductions due to tax presential treatments offered these ESO plans.

Moving forward towards are last dependent variable which is the main motive of our study, as does the capital cost of the company decreases with the adoption of ESO, as the results showed that the cost of capital decreases as the ESO increases. The Employee Stock Ownership has a substantial on the company's equity cost. As we have seen that the results of cost of debt and cost of equity are that they decrease when ESO increases so also does the cost of Capital. However, as we have seen that Cost of Equity varies more than cost of debt so the impact of Cost of equity is more on the cost of capital as we seen that the agency conflict is decreased and it reduces the cost hence, more the variation of cost of equity can be seen in the cost of capital (Ivanov & Zaima, 2011). As discussed earlier in our literature review and research employees stock ownership gives a benefit to the firms as it increases the productivity and motivation level of employees (Ginglinger, Megginson, & Waxin, 2011) Which also has an impact onto the betterment of company and on its stock. ESO sends a positive signal and which turns and benefits shareholders lowering the cost of capital as whole, as cost of equity decreases due to lower agency cost and less taking debt thus reducing the cost of debt (Li et al., 2019). Hence Cost of Capital decreases for a company when opted Employee Stock Ownership plans and give chance to employees be the ownership that they can work for the betterment of the company together and align their goals with the shareholders reducing the principal agent conflict.

## 6. Conclusion

This study discussed the relationship between the dependent variables i.e., cost of debt, cost of equity and cost of capital with the independent variable Employee Stock Ownership. The results indicate a direct and statistically substantial bond between all the dependent variables and independent variable. On a panel data we looked into our research question set and found significant results to our previous studies as well. Our study found out that ESO has a substantial bond with the cost of equity, cost of debt and cost of capital.

In the light of the literature, ESO tends to overcome the problems of Principal Agent conflict and hence minimize the cost which lowers the Cost of Capital (Aubert et al., 2017; Campa & Kern, 2020). It has negative correlation with the Cost of Equity, Debt and Capital, as ESO increases the Cost decreases for all which is in light with our previous studies as negative relationship with Cost of Equity is seen and change in beta due to that investor see this as a positive signal of giving shares as ESO which increases the share prices(Ivanov & Zaima, 2011). Our results of the paper also must be taken into look a broader context as Employee being part of the firm and acting as shareholders, gives them motivation and increase their morale, participation which helps to benefit the organizations. Therefore, ESO is a measure to reduce the agency cost and the financial risks up to a certain level in the company. The employee stock ownership (ESOP) decreases the conflict between company's stakeholders and ultimately lead towards lower cost of equity capital (Fu Cheng & Shanshan Ji, 2021).

## 6.1. Limitations of the Study

This study is one of the studies that investigate the relationship between ESO and cost of capital among emerging economies. Consequently, it indicates its confinement to Pakistan's KSE-100 companies which are also the entities with the most advanced and developed ESO plans. The future research can be directed to other developing countries and could be expanded based on increased sample size. The findings may not be generalizable to small firms. Our investigation focuses on one institutional context: the Pakistan (KSE-100). This may limit the generalizability of the findings to different settings. Furthermore, other dependent variables including company performance, employee performance, share prices can also be used for getting different results.

## 6.2. Implications of the Study

This study adds towards the theoretical and practical implications, which are discussed below:

## 6.3. Theoretical Implications

This study advocates the criticality of ESO in terms of describing the theoretical concept of agency cost. It also contributes towards the relationship between ESO and agency cost that how it helps to minimize the cost and benefits to the company and shareholders. This study helps for management of the companies and owners to analyze and receive benefits from ESO. It signals to management and shareholders that implementation of ESO can benefit the company as employees feel motivated and work for betterment of the organization.

It encourages managers to involve their employees in the life of the business by granting them company shares. The findings signal to management and shareholders that the implementation of ESO can benefit the organization. They also encourage managers to come up with strategies to reduce the concerns of equity investors at significant levels of ESO.

## 6.4. Practical Implications

The present research adds value to the both literature and actual environment of organization. It contributes to the contrasting debate about the relationship between ESO and agency costs, suggesting that debt holders associate ESO with a lower financial risk. Organization's shareholders balance the positive effects that stem from increased employee motivation and commitment with the negative effects that arise from management entrenchment and property rights dilution, which explains the limited impact of ESO on the cost of equity. This study would guide the policymakers in framing the policies for ESO. It can be an answer to address the question of the recognition and the implication of employee in the modern firms. Employee motivation, participation, and communication increase with higher levels of employee ownership. Therefore, ESO can reduce the agency costs and risks beyond a certain level of employee ownership, which reflects in a form of lower cost of capital.

## 6.5. Future Research Directions

Future research should, therefore, test the relationship between ESO and firms' cost of capital in different institutional settings through a matching sample procedure to highlight any differences due to different legal regimes. Other investigations could also take large and small firms into account to examine whether ESO is more or less effective in decreasing the cost of capital depending on firm size.

Furthermore, in future studies, researchers can check out the comparison of Cost of Capital between Non ESO companies and ESO Companies.

This study implies regression analysis for examining the relationship, other research methodologies including questionnaire survey, interviews can also be implied to get more insight towards ESO and cost of capital.

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