The Impact of Human Resource Accounting on Profitability: A Study of Listed Textile Firms on PSX

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ABSTRACT

Organizations spend a considerable amount of money on their employees; however, the accounting treatment and disclosures of this amount still needs to be standardized. This study aims to assess how the number of employees and staff cost affects the financial outcomes of textile enterprises listed on the Pakistan Stock Exchange. The purpose is to assist organizations in understanding the impact and worth of their human capital investment in accomplishing long-term goals. The study utilized an ex post facto analysis methodology and obtained data from the financial statements of 73 organizations over a five-year period from 2017 to 2021. Panel regression analysis was performed using E-views software. The Breusch-Pagan test is employed to measure the heteroscedasticity of regression errors, and then the Hausman test is utilized to determine the best approach between a fixed effect and a random effect. The findings revealed that staff cost positively affects financial performance, whereas the number of employees significantly negatively affects financial performance. Therefore, the study recommends investing in employees to boost the firm’s profitability. Also, accounting standards and disclosures should be incorporated into human resource accounting.

Keywords: human resource accounting, staff cost, number of employees, return on assets, return on capital employed.

JEL Classification: C23, J24, M41, M52, O15

INTRODUCTION

Human capital is regarded as a production factor that substantially influences a business's growth. When a business enterprise invests in human assets either via acquisition or training, it anticipates that these investments will generate earnings and provide services in the future (Barcons-Vilardell et al., 1999). The global market comprises of numerous companies and stated rivals in various industry standards. Therefore, enterprises must use worker profitability to produce more value for the firms for further development that gives a competitive edge on an individual basis. Companies use comprehensive human capital development programs to improve their employees, not only to accomplish business objectives but also to ensure sustainability and long-term presence (Marimuthu et al., 2009). Still today, human resource is not adapted as an asset by accounting standards. Even organizations with substantial capital assets could fail if they do not possess efficient human resource (Borah, 2023). So, human resource accounting aims to assess the value of an organization's human assets systematically. It then documents this valuation within the financial report, conveying the evolving value over time and the outcomes derived from their deployment to the stakeholders of the financial
statement (Pathan, 2023). Moreover, in the process of appreciating the significance of human capital, it is imperative to consider a multitude of factors. These factors encompass not only the conventional elements such as human resource amortization and idle intervals but also extend to encompass the commitment and allegiance demonstrated by the workforce. It is essential to ensure that these intricate details are made transparent and disclosed in a comprehensive manner (Pathak, 2023).

Traditionally, human resource expenditure has been viewed as a charge against revenues since it does not create tangible assets. However, this view is changing, and spending on human resources should be considered as capital expenditures because they provide benefits that can be realized over time and measured in monetary terms (Kalpana & Gopinath, 2013). The shift in viewpoint highlights how pivotal our human capital is and its potential to dramatically influence a business's long-term prosperity. When we talk about human resource accounting, we are discussing the identification and measurement of data pertinent to human resources. We then pass on this information to those who are interested (American Accounting Association’s Committee on Human Resource Accounting, 1973). It's about quantifying the costs and value of employees to a company, inclusive of expenses related to recruiting, selecting, hiring, training, and developing the workforce (Kalpana & Gopinath, 2013). The objective is to figure out the economic value that the employees add to the organization.

Human resource accounting goes beyond just assessing employees' economic value. It recognizes human resources, tabulates their numbers, and engages with interested individuals (Gupta, 2021). Despite ongoing discussions, the aspect of accounting for human resources is still a contested topic. To resolve this, researchers and writers have explored methods for valuing and reporting individuals in an organization's financial records (Edom et al., 2015). If businesses can correctly account for their human resources, it paves the way for informed decisions and effective resource allocation to fulfill their goals. The core purpose of HRA is to equip management with comprehensive data on the value and costs of human resources. Gaining access to this data allows management to improve the caliber and scope of the products and services the company offers. Furthermore, HRA can notify stakeholders about the costs related to human resources and the potential benefits they could reap from them. HRA offers cost-value insights to management, thus enabling them to make well-informed and efficient decisions on acquiring, allocating, developing, and managing human resources. Ultimately, the goal is to achieve cost-effective business outcomes through the optimization of human resources (Danaei et al., 2014).

Despite the lack of accounting rules guiding the inclusion of HR items in financial statements, human resources are considered a company's intellectual capital, as the competencies and skills of its personnel define the organization's performance. Many companies reveal that staff development incurs significant expenditures, such as training, employee welfare, medical care, and insurance, which are currently classified as operating expenses, impacting the business's value and profitability for a certain period (Khan, 2021). Therefore, calculating costs and establishing employees' worth and financial value is crucial for the organization. To maximize human capital, businesses need to establish an environment where human knowledge, skills, and creativity can be fostered. The current challenge for
the business sector is creating and enhancing human capital capabilities concerning organizational demands (Ofurum & Adeola, 2018). By recognizing the value of human resources and investing in employee development, companies can achieve a competitive advantage in the market. This underscores the importance of accounting for human resources and developing a framework to include them in financial statements.

According to Kataria (2022), further exploration of valuation techniques, frameworks, and a comprehensive examination of their real-world applications is required. Additionally, active participation from experts in both human resource management and accounting fields is essential in fostering meaningful discussions surrounding valuation principles and their effective integration into real-world scenarios. Hence, this research aims to assist organizations in understanding the impact and worth of their human capital investment in accomplishing long-term goals. Investing in human capital is essential for improving the quality of the firm's foremost assets. Managers who understand HR accounting thoroughly can make informed decisions regarding talent investment, considering comparative data on the costs and beneficial effects of investing in human capital.

**LITERATURE REVIEW**

**Accounting Treatment**

Barcons-Vilardell et al. (1999) and Khan (2021) have shed light on human resources' accounting treatment and measurement. Training and selection costs can be classified as capitalized expenses; however, departure costs should be classified as revenue expenses, according to Barcons-Vilardell et al. (1999). On the contrary, Khan (2021) identified the cost-based and economic approaches as two approaches for evaluating human assets. The **cost-based approach** treats the amount of money utilized for human resources as both expenses and assets. The costs can be beneficial in the current accounting period, while the assets are projected to generate future profits for the company. In contrast, the **economic approach** values the ongoing worth of individual benefits to be provided on a continuous basis. This approach assesses the future payment of a specific working group until retirement and discounts it to show the current worth of future pay (Amahalu et al., 2017). Overall, these approaches provide managers with tools to evaluate the effect of their human capital investment and to make informed decisions about talent investment. By capitalizing on the value of human resources, businesses can improve the quality of their most critical assets and ultimately improve their profitability.

**Disclosure**

The adoption of US GAAP and IFRS is increasing rapidly in the worldwide financial accounting setting. This trend could simplify the assessment of different valuation and reporting standards. As a result, non-traditional metrics, such as the valuation of human resources determined by employing HRA methodologies, may be included in future financial statements (Bullen & Eyler, 2010). Incorporating HRA data in financial statements can have a significant impact on investors' decisions.
to invest in equity. Therefore, users may choose to opt out of financial statements and financial statement notes if HRA information is not included. HRA statistics can also inform internal management decisions and demonstrate that a company's investment in human resources pays off in the long run (Avazzadehfath et al., 2011).

In Bangladesh, al Mamun (2009) investigated the extent of HRA disclosure in 55 randomly chosen enterprises and found that, on average, companies disclose 25% of all HRA components. The study also showed a strong correlation between HRAD and firm size, company category, and profitability, while company age did not affect HRAD. Whereas, in Pakistan, Ullah et al. (2020) conducted a study on 96 publicly traded firms listed on the KSE-100 Pakistan Stock Exchange to assess the effect of HRAD on financial outcomes. According to the study, HRA disclosure has a significant positive influence on a company's success, as evaluated by return on assets. The study also considered the control and independent variables of company size, financial leverage, and foreign ownership, which further validated the positive correlation between HRAD and firm performance.

**Empirical Studies**

In bibliometric analysis, Bhooshetty (2023) explored 2438 publications related to HRA. The highest number of articles were published in 2020, exceeding 4000. Also, the USA was the most productive and impactful country with the highest number of articles. The conclusion underscores the importance of suggesting greater standardization and consistency in the metrics used for reporting. Furthermore, integrating the fields of human resource accounting, behavioral finance, and entrepreneurship gives a holistic technique for delving into the impact of psychological factors on entrepreneur success. This approach yields significant wisdom for those in the entrepreneurial realm, as well as for researchers and policymakers interested in this domain (Borah, 2023).

KS (2022) analyzed the impact of HRA on managerial performance. The research applied the sample T-test and percentage analysis on the 50 responses by HR professionals. The findings reveal a substantial influence and remarkable efficacy of HRA methods on managerial performance and the organization's overall efficiency. In light of these outcomes, it was suggested that adopting the mandatory utilization of HRA could lead to a more equitable representation of business appraisal, consequently fostering the holistic advancement of the enterprise. In the recent research conducted by Lukman & Abdulrasaq (2023), some intriguing findings came to light. It turns out that human resource practices have a substantial impact on various aspects of a company's performance, such as earnings per share, turnover rates, and return on capital employed. The research goes even further, recommending that organizations consider embracing a cultural shift that places a high value on education, training, and continuous retraining for their workforce. This could lead to a significant enhancement in overall performance levels.

Further, two studies were conducted on oil and gas companies in Nigeria to assess the influence of Human Resource Accounting (HRA) on financial outcomes. Odunayo & Festus (2020) examined the relationship between HRA and accounting conservatism in oil and gas companies. Their research revealed that wages and salaries, pensions and retirement benefits, and staff numbers all had
statistically significant combined effects on accounting conservatism. However, the number of employees (NE) coefficient proved to be statistically insignificant, implying that it does not promote accounting conservation. In a separate study, Lambe et al. (2021) evaluated the impact of training and development costs on the financial outcomes of publicly traded oil and gas firms in Nigeria. According to the study, these expenses had a significantly positive impact on financial outcomes and minimized inefficiencies in productivity. The study utilized EViews software for statistical analysis.

Several studies have shown a positive correlation between Human Resource Accounting (HRA) and the maximization of shareholder wealth. In manufacturing firms, it has been demonstrated that properly accounting for human capital expenditures and compensating employees well can lead to higher performance levels and a positive return on investment (Davies, 2018). Godwin & Udeh (2021) conducted a study on non-financial service companies publicly traded on the Nigerian Stock Exchange to investigate the impact of HRA on performance. The study found that the cost of staff training and development had a substantial positive influence on earnings before interest, taxes, depreciation, and amortization (EBITDA), but did not significantly affect return on capital employed (ROCE). However, an increase in personnel had a significant positive influence on ROCE, indicating that investing in human capital can be beneficial for the financial performance of non-financial service firms.

Studies have also found a beneficial relationship between Human Resource Accounting (HRA) and financial outcomes. Alekhya & Lakshmi (2020) suggest that HRA is significantly associated with growth metrics, including revenues and net income. Asika et al. (2017) found that wage increments, increases in staff level, and retirement perks positively impact organizational profitability, and recommend that a financial reporting standard for HRA be adopted. In service-oriented organizations, human resources are considered the most valuable asset. Amahalu et al. (2017) examined the influence of HRA on the financial outcomes of telecommunication companies listed on the Nigerian stock exchange. The study found that HRA had a significant and positive impact on Return on Equity, Return on Assets (ROA), and Return on Capital Employed (ROCE), indicating that accounting for human resources in financial reporting can lead to better financial performance.

Some researchers have focused on the relationship between HRA and financial outcomes, while others have examined the impact of HRA on performance measures. For instance, Salawudeen & Suleiman (2018) reported a favorable relationship between the cost of training and development, the quantity of personnel, and performance measures in 18 manufacturers of consumer goods listed on the Nigerian Stock Exchange. Kumar & Awasthi (2018) and Dhar et al. (2017) conducted conceptual research and concluded that investing in human resources has consistently improved organizational performance. On the other hand, Ofurum & Adeola (2018) examined data from nine service companies listed on the Nigerian Stock Exchange and revealed that employees were not sufficiently compensated, leading to a minimal impact on operating profit and return on capital employed. They suggested that management should adequately compensate staff and make retirement benefits appealing to recruit the best minds to their organizations.
Marimuthu et al. (2009) studied the literature on human capital as well as performance and found that human capital development improves firms’ innovativeness and performance. Research emphasizes that human capital is a worthwhile asset for organizations. Investments made in this area can boost performance and yield financial gains. Chaudhry & Roomi (2010) conducted an exploratory study in Pakistan and found that HRA approaches can be useful for evaluating capital investment, and an enterprise's investment in human resource development programs significantly influences the firm's net income. Similarly, Souza & Rohit (2021) found that expenses related to employee recruitment and training have a significant positive impact on the net income and return on equity of durable consumer companies listed on NSE. Edom et al. (2015) focused their research on the impact of HRA on the profitability of Access Bank of Nigeria Plc. The researchers collected secondary data from the bank and concluded that the bank's profit was significantly correlated with its outlays on training and development programs, but the number of personnel had no significant impact on the bank's profitability.

To understand the mediating role of human resource between Corporate Entrepreneurship and Organizational Performance, Dr. Muhammad Zia-ur-Rehman et al. (2020) conducted research on the textile sector of Pakistan. The results of the research showed full mediation and suggested to improve the skills, knowledge, and experience of the human resource. The research also emphasizes the linkage between the importance of human resources and its impact on organizational performance. Overall, these studies suggest that investing in human capital development can have a considerable beneficial influence on a company's financial outcomes, but adequate compensation and appealing retirement benefits are also necessary to recruit and retain talented employees.

**Conceptual Framework**

Assessing profitability is crucial for any company to thrive in the long term. According to Hofstrand (2009) a corporation's primary goal is to make money, and profitability is a vital factor in achieving that goal. To ensure future profitability, it is crucial to correctly evaluate present and previous profitability and forecast future profitability. Also, investing in human capital development is an effective way to safeguard or increase a company's future profitability. However, Flamholtz (1999) notes that even though the dollars spent on human capital development may create profits beyond the current period, they are still counted as incurred costs for the year. This means that management must be willing to invest in human resources, even if it decreases present earnings drastically, to ensure future profitability.

**Staff Cost**

Staff costs are referred to as the entire amount of compensation, in cash or in-kind, paid to workers for their services throughout the accounting period, regardless of when the employee is paid (Landefeld et al., 2010). This compensation comprises salaries, earnings supplements, bonuses, and profits. Furthermore, earnings supplements include employer payments made on the employee's behalf, such as contributions to the employee's pension and insurance schemes, as well as government social security benefits (Ndum & Oranefo, 2021).
Number of Employees

The performance and profitability of an organization can be significantly impacted by its size. As the number of employees grows, so does the organization's complexity, demanding a larger requirement for highly skilled staff as well as more coordination and control effort. According to Becker-Blease et al. (2010), this can lead to higher costs associated with the management, contracting, and monitoring of complex operations. Doğan (2013) employed 200 publicly listed firms on the Istanbul Stock Exchange over four years to analyze the connection between a company's size and profitability. The study points out a positive link between the number of workers and the return on assets. This implies that larger workforces correlate with better economic performance. This could mean that despite the higher costs of managing a larger workforce, the potential benefits from improved performance and profitability could offset these costs.

Profitability

Profitability is like a yardstick to measure how well a company is doing. It's simply a comparison between what a company earns and what it spends. The more efficiently a company runs, the more it earns and spends less compared to its less efficient peers. Managers constantly aim to boost profitability, which is crucial for company owners (Hofstrand, 2009). The value of a company also heavily leans on its profitability. Annual cash flow multiples are useful tools for analyzing a company's net cash flow (Lambe et al., 2021). Return on assets (ROA) is yet another measure for assessing the firm's financial management and profitability. Companies that have higher ROA are better at handling their finances and generating profits, while a lower ROA indicates room for improvement. The ROA is calculated using the following formula:

\[ ROA = \frac{Net\ Income}{Average\ Total\ Assets} \]

Another significant profitability indicator is the Return on Capital Employed, or ROCE. It evaluates a company's ability to turn its capital into profit. It's a dependable metric because it juxtaposes earnings with both capital and liabilities. This makes it a go-to choice for investors when they're deciding whether to invest in a company or not. It's essentially a key pointer of a company's return on investment. Indeed, Godwin & Udeh (2021) state that ROCE is one of the most precise measures of a firm's outcomes, and therefore, is a decisive element in investment decisions. The ROCE is calculated using the following formula:

\[ ROCE = \frac{EBIT}{Total\ Assets - Current\ Liabilities} \]

Figure 1 shows the relationship between the input variables (like Staff Cost and Number of Employees) and the output variable (Profitability). The stand-ins for the output variables are ROA and ROCE, which are widely recognized indicators to assess a company's profitability. The goal of analyzing this relationship is to have a better understanding of the elements that impact a company's profitability.
This study intends to help decision-makers comprehensively assess the impact of human capital expenditures and evaluate the link between organizational performance and human resource development. Additionally, the study aims to identify gaps in the existing literature for future research and to create a quantitative framework for measuring the impact of HRA on profitability. The following hypotheses have been developed in order to achieve these goals:

\( H_{01} \): Staff Cost has no significant effect on Return on Asset.

\( H_{02} \): Number of Employees has no significant effect on Return on Asset.

\( H_{03} \): Staff Cost has no significant effect on Return on Capital Employed.

\( H_{04} \): Number of Employees has no significant effect on Return on Capital Employed.

**DATA AND METHODOLOGY**

The investigation conducted an ex post facto research design, utilizing all textile firms listed in three sectors of the Pakistan Stock Exchange: composite, spinning, and weaving, as the study population. The total number of firms in these sectors was 75 as of 4th August 2022. A critical sampling strategy was adopted to identify the enterprises for the study based on the availability of annual financial reports. The final sample size consisted of 73 companies for the period spanning 2017-2021. To empirically investigate the relationships between the variables, the study utilized the panel regression analysis method. The data collected were analyzed using EViews 9.

**Model Specification**

Mathematically, \( P = f \) (SC, NOE), i.e., profitability is a function of staff cost and a number of employees. Therefore, the model for the study is expressed as follows:

\[
ROA_{it} = \beta_0 + \beta_1 \cdot \log SC_{it} + \beta_2 \cdot \log NOE_{it} + \epsilon_{it}
\]

(1)

\[
ROCE_{it} = \beta_0 + \beta_1 \cdot \log SC_{it} + \beta_2 \cdot \log NOE_{it} + \epsilon_{it}
\]

(2)

Where;

\( \beta_0 \) = intercept of the regression
\beta_1, \beta_2 = \text{Coefficient (Slope of the regression line)}

\varepsilon = \text{error term}

ROA = \text{Return on Asset}

ROCE = \text{Return on Capital Employed}

SC = \text{Staff Cost}

NOE = \text{Number of Employees}

**RESULT AND DISCUSSION**

**Descriptive Statistics**

Table I presents the descriptive statistics for all the factors examined in the research. To ensure the credibility of the statistical analysis results, a level-log regression model is utilized to make the data as "normal" as possible.

<table>
<thead>
<tr>
<th>Table I: Descriptive Statistics</th>
<th>ROA</th>
<th>ROCE</th>
<th>SC</th>
<th>NOE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.028072</td>
<td>0.064844</td>
<td>8.568534</td>
<td>2.960186</td>
</tr>
<tr>
<td>Median</td>
<td>0.027108</td>
<td>0.111252</td>
<td>8.657679</td>
<td>3.046885</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.978076</td>
<td>4.554833</td>
<td>10.06157</td>
<td>4.287107</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.780854</td>
<td>-6.480426</td>
<td>5.661288</td>
<td>0.000000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.091611</td>
<td>0.518754</td>
<td>0.786124</td>
<td>0.764784</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.090887</td>
<td>-4.549527</td>
<td>-1.411732</td>
<td>-1.498613</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>50.07038</td>
<td>89.08239</td>
<td>6.144237</td>
<td>6.199479</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>33768.28</td>
<td>113955.6</td>
<td>271.5930</td>
<td>292.3046</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
<tr>
<td>Sum</td>
<td>10.24640</td>
<td>23.66797</td>
<td>3127.515</td>
<td>1080.468</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>3.054910</td>
<td>97.95458</td>
<td>224.9487</td>
<td>212.9017</td>
</tr>
<tr>
<td>Observations</td>
<td>365</td>
<td>365</td>
<td>365</td>
<td>365</td>
</tr>
</tbody>
</table>

The analysis indicates that the dataset exhibits a wide spread of values from the mean for ROA and ROCE, which could be attributed to the presence of negative values. On the other hand, SC and NOE demonstrate less dispersion from the mean value. The skewness of these variables also indicates that ROA has a long right tail, while ROCE, SC, and NOE have long left tails. Additionally, all distributions are leptokurtic. The Jarque-Bera test's null hypothesis presumes that the data exhibits a normal distribution, and the results reveal that the null hypothesis is rejected, with all variables having probability values below 0.05.
Descriptive Statistics

The goal of regression analysis is to figure out the interrelation of the variables. Due to this, the influence of numerous concurrent effects on a single dependent variable is determined (Sykes, 1993).

Table II: Breusch-Pagan Test (Model 1)

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Cross-section</th>
<th>Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>27.86855</td>
<td>88.55897</td>
<td>116.4275</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

Table III: Breusch-Pagan Test (Model 2)

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Cross-section</th>
<th>Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>58.43572</td>
<td>0.123967</td>
<td>58.55969</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.7248)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

The Breusch-Pagan test assesses the heteroscedasticity of errors in a regression model. The probability values in Table II and Table III are below 5%, indicating that heteroscedasticity exists in both models. Therefore, the null hypothesis of the Breusch-Pagan test is rejected, implying that the Pooled Least Square (PLS) approach is more appropriate than the random effect model.

Table IV: Hausman Test (Model 1)

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>7.204808</td>
<td>2</td>
<td>0.0273</td>
</tr>
</tbody>
</table>

Table V: Hausman Test (Model 2)

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>11.873008</td>
<td>2</td>
<td>0.0026</td>
</tr>
</tbody>
</table>

The results of the Hausman test demonstrate that the p-value for both models is below 5%, as displayed in Tables IV and V. Consequently, the null hypothesis affirms that the random effect model is more suitable than the fixed effect model is rejected. Therefore, the fixed effect model is estimated using the dummy variable technique.
Table VI: Panel Regression Result (Fixed Effect)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.308726</td>
<td>0.292103</td>
<td>-4.480351</td>
<td>0.0000**</td>
</tr>
<tr>
<td>SC</td>
<td>0.228660</td>
<td>0.047347</td>
<td>4.829430</td>
<td>0.0000**</td>
</tr>
<tr>
<td>NOE</td>
<td>-0.210284</td>
<td>0.046588</td>
<td>-4.513671</td>
<td>0.0000**</td>
</tr>
</tbody>
</table>

Effects Specification

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.408820</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.257967</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.078915</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>1.806001</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>450.9402</td>
</tr>
<tr>
<td>F-statistic</td>
<td>2.710059</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

** shows highly significant result at 1%

The analysis uncovers that the predictor variables, namely Staff Cost and Number of Employees, are responsible for 41% of the variations in return on assets. The error term accounts for the remaining 59%, based on the $R^2$ value. Furthermore, the F-statistic shows a statistically significant simultaneous impact of the predictor variables on the dependent variable, with a p-value of less than 0.05.

The constant value of -1.308 represents changes in ROA if the independent variables (SC and NOE) remain constant. The coefficient of log of staff cost (SC) is 0.23, which indicates that a percentage rise in staff cost leads to a 23% rise in ROA. In contrast, the -0.21-coefficient value of the log of NOE suggests that a percentage increase in the number of employees could result in a 21% decrease in ROA. The p-values for both explanatory variables are highly significant, and therefore, the null hypotheses $H_{01}$ and $H_{02}$ are rejected.
Table VII: Panel Regression Result (Fixed Effect)

Dependent Variable: ROCE  
Method: Panel Least Squares 
Date: 09/29/22  Time: 22:33 
Sample: 2017-2021 
Periods included: 5 
Cross-sections included: 73 
Total panel (balanced) observations: 365 

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-6.357149</td>
<td>1.578632</td>
<td>-4.026999</td>
<td>0.0001**</td>
</tr>
<tr>
<td>SC</td>
<td>1.095770</td>
<td>0.255881</td>
<td>4.282346</td>
<td>0.0000**</td>
</tr>
<tr>
<td>NOE</td>
<td>-1.002354</td>
<td>0.251780</td>
<td>-3.981074</td>
<td>0.0001**</td>
</tr>
</tbody>
</table>

Effects Specification

Cross-section fixed (dummy variables)

<table>
<thead>
<tr>
<th>R-squared</th>
<th>0.461505</th>
<th>Mean dependent var</th>
<th>0.064844</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.324096</td>
<td>S.D. dependent var</td>
<td>0.518754</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.426485</td>
<td>Akaike info criterion</td>
<td>1.314465</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>52.74802</td>
<td>Schwarz criterion</td>
<td>2.115814</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-164.8898</td>
<td>Hannan-Quinn criter.</td>
<td>1.632931</td>
</tr>
<tr>
<td>F-statistic</td>
<td>3.358626</td>
<td>Durbin-Watson stat</td>
<td>2.509849</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** shows highly significant result at 1%

According to the R² value, variations in the predictor variables (SC and NOE) account for 46% of the total variations in return on capital employed, while the error term accounts for the remaining 54%. The F-statistic's p-value is below 0.05, suggesting that the predictor variable's collective impact on the dependent variable is statistically significant. The constant value of -6.36 is autonomous and represents changes in the return on capital employed if the independent variables (SC and NOE) are maintained constant.

The coefficient of log of staff cost (SC) is 1.10, which shows that a percentage rise in staff cost might result in a 110% increase in ROCE. At the same time, the -1.00-coefficient value of the log of NOE indicates that a percentage rise in the number of employees might result in a 100% decrease in ROCE. Since the p values of both explanatory variables are highly significant, the null hypothesis, $H_{o3}$ and $H_{o4}$, are rejected.
CONCLUSION AND POLICY IMPLICATION

The sole aim of this research was to investigate how staff costs and the number of employees impact the financial outcomes of publicly traded textile enterprises in Pakistan. The study utilized staff costs as well as the number of employees as indicators of human resource efficiency and return on assets as well as return on capital were used as indicators of financial performance. The researchers employed panel regression analysis to explore the relationship between the variables. The study collected data from the annual financial statements of 73 firms over a five-year period from 2017 to 2021.

The study results demonstrate that staff costs have a significantly positive impact on both return on assets and return on capital employed. In contrast, the number of employees have a significantly negative effect on both return on assets and return on capital employed. This implies that investing in employees leads to increased productivity in the organization. It is, therefore, important for organizations to train and develop their employees and provide them with health, safety, and retirement benefits to achieve organizational goals.

The study also hypothesizes that the number of employees is being depleted in various physical labor tasks, which aligns with the effective technological advancements in the textile sector. The use of modern technology reduces the need for a large number of physical laborers, and hence the number of employees decreases. Therefore, it is essential for textile firms to embrace technological advancements and adapt to changes in the sector to remain competitive and improve financial performance. The study suggests that the HRA standards should be incorporated, and the companies should make proper disclosures to understand their interest in the betterment of the employees.

As we step back and look at the big picture, it's clear that certain rules can create a big positive change. Following Human Resource Accounting (HRA) standards could bring valuable advantages. Also, being open about how they support employees' well-being can improve a company's reputation. To sum up, our exploration of textile companies' financial well-being has shown important ways to grow. Treating the employees well and giving them power is extremely important. When combined with being open to new technology, these actions not only lead to success but also a better and more advanced future.
REFERENCES


