



EFFECT OF ACCOUNTING FOR EMPLOYEE COSTS ON FINANCIAL PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

Joseph Agida Ijing¹, Celestine Ugar Akwuyia², ACA, Leo Ekpabi Kekong³

¹Department of Accountancy, University of Cross River State

²Office of the Auditor General of Cross River State.

Abstract

This study on effect of accounting for employees cost on financial performance of firms was carried out to examine how employees cost influences the profitability of firms. The specific objectives of the study were examining the effect of wages and salaries on return on Asset (ROA) of companies, ascertain the effect of employee's retirement benefits on Return on Assets (ROA) of companies and evaluate the effect of other employees benefits on Return on Assets (ROA) of companies. Research questions and hypotheses were formulated in line with the specific objectives. This study adopted the ex-post facto research design. The study population consists of twenty-six (26) listed manufacturing firms of the Nigerian Exchange Group Ltd. The sample size of ten (10) manufacturing companies, which represents roughly 38% of the entire listed manufacturing firms were selected using purposive sampling technique. The study adopted unit root test and descriptive statistics as preliminary tests. Hausman test was used to determine whether fixed effect random panel regression is a better model than random effect random effect panel regression model. The study found out that salaries and wages has a positive significant effect on the financial performances of listed manufacturing consumer good companies in Nigeria, Employees retirement benefits has negative significant effect there is a positive and significant effect on the financial performances of listed manufacturing consumer good companies in Nigeria. The study also found that other employees benefits has positive significant effect on the financial performances of listed manufacturing consumer good companies in Nigeria Based on the findings, it was recommended that in order to sustain a robust financial performance, Management of companies should ensure proper accounting for the cost of employees as it influence the financial performances of firms Employees retirement benefits should be properly planned and provided for in the records of companies since labour plays a significant role as a factor of production Provisions should always be made for other employees benefits as it will serves as motivation in encouraging them to put in their best for higher output for higher profits.

Keywords: Employee cost, Financial performance, Accounting.

1.0 Introduction

Employee cost remains the most critical factor of production because it is the only coordinating factor that ensures that the firms operate profitably. Without Human effort, other factors of production cannot operate optimally no matter how efficient, sophisticated and effective they may be (Ahmed, 2010; Kashive, 2013; Emenike, 2014; Asika, Chitom, & Chelichim, 2017). The need to account for labour or employee cost derives from the argument that human capital also predicts the fortunes of firms and accounts for the difference between the book value of the assets of firms and the market valuation of the firm (Mahmoodi, Babaei & Mahamade, 2013; Kashive, 2013; Ezeagba, 2014).

Human capital acquires this capability because of its inherent nature and added value derived from work experience, education, training, intelligence, skills, health, loyalty and punctuality of employees (Kenton, 2019). These attributes, which are absent in other factors of production, support the argument of the field of human resources accounting (HRA) that human capital should be treated as an asset, although intangible, and be reflected in the financial statements of the firm like any other asset- tangible and intangible. Furthermore, it suggests the importance of appropriately accounting for the human capital in the books of accounts of firms by deploying human resources accounting processes to measure human resource cost which includes the cost of recruiting, salaries and wages, retirement benefits, training and other welfare benefits such as medical services, canteen services etc. Properly accounting for human resource

investment can facilitate the evaluation of employees training programs, increase productivity and improve managerial decision making regarding promotions, transfers, layoffs, replacement, and employee turnover (Prabhakar, 1993).

Greater value from human capital accrues to the firm especially when such human capital is effectively deployed within the organization to optimize the skills and expertise of the employees (Flamholtz, 1972). Moreno, human capital directs and creates all other factors of production and enables the organization to attain competitive advantage over its competitors (Mahmoodi et al., 2013). Kalpana and Gopinath (2013) further argue that an effective human capital will bring to life an otherwise ailing firm, while profitable firms have equally been liquidated by ineffective human capital. Thus, human resource accounts for the difference in performance of otherwise homogenous firms (Okpako, Atube & Olufawoye, 2014; Osekeme, 2017; Onyinyechi & Ihendinihum, 2017). This underscores the importance of human resource to the firm.

1.1 Statement of the Problem

The current global economy is driven by information and technology. Thus we are in the information age, where human capacity and innovative ability rules the world and not just machines (Osekeme, 2017). Therefore, human resources play a critical role of coordinating all organizations, activities towards the achievement of the corporate goals and objectives. With machine, materials and money little or nothing could

be achieved without human contributions (Olaniyan & Lucas, 2008). This implies that, Nigerian manufacturing firms would only be able to effectively participate in the world economic renaissance if owners of firms appreciate the importance of investing in human resource (Osekeme, 2017).

However, while expenses on machine and materials including inventory and balances of accounts are recognized in the statement of financial position of listed manufacturing firms in Nigeria expenditure on labour is written off to Income Statement instantaneously. The implication is that the assets base of firms would be understated and the financial performance such as Returns on Asset would be distorted. The importance of accounting for employee cost as an important factor of production and any other revenue generating asset was stressed by Likert (1967) by arguing that ignoring the human assets inevitably leads to reductions in profit over the long run. Therefore, the need to provide the scientific basis from empirical evidence on the relationship between expenditure in employee cost and the performance of the firm has become imperative. However, in spite of the importance of establishing this relationship only a few empirical studies relate to Nigeria from the body of literature on human resource accounting.

Furthermore, prior studies on Nigeria focused mainly on the disclosures of HR on the financial statements without justifying the imperatives that should motivate the disclosures in terms of benefits to the owners or investors. In the case of the few studies that discussed the benefits of HR on the firm, the

criteria considered were the impact of HR investment on the profit after tax, total revenue and net assets of the firm. Attempt has not been made by prior studies to consider the impact of accounting for Employee costs on the return on Assets (ROA) of listed firms in the consumer goods sub-sector in Nigeria. Therefore, the need to provide such empirical evidence has made this research inevitable as it seeks to fill this knowledge gap by providing insight into accounting for employee costs and financial performance of the listed manufacturing firms in the consumer goods sub-sector in Nigeria.

1.2 Objectives of the Study

The main objective of the study was to examine the effect of accounting for employee costs on the financial performance of listed manufacturing consumer goods companies in Nigeria. The specific objectives were to:

- i) Examine the effect of Salaries and Wages on the Return on Assets of listed manufacturing companies in Nigeria.
- ii) Ascertain the effect of Employee Retirement Benefits on the Return on Assets of listed manufacturing companies in Nigeria.
- iii) Evaluate the effect of Other Employee Welfare Benefits on the Return on Assets of listed manufacturing companies in Nigeria.

1.3 Research questions

The study provides answers to the following research questions which are related to each of research objectives.

- i) Of what effect is salaries and wages on Return on Assets of listed manufacturing companies in Nigeria?
- ii) To what extent do Employee Retirement Benefits Influence Return on Assets of listed manufacturing companies in Nigeria?
- iii) How does Other Employee Benefits Influence Return on Assets of listed manufacturing companies in Nigeria?

1.4 Statement of hypotheses

The following research hypotheses, formulated in the null form, were tested in this study.

- i) Salaries and wages have no significant effect on Return on Assets of listed manufacturing consumer goods companies in Nigeria.
- ii) Employee Retirement Benefits have no significant effect on Return on Assets of listed manufacturing consumer goods companies in Nigeria.
- iii) Other Employee Welfare Benefits do not have significant effect on Return on Assets of listed manufacturing consumer goods companies in Nigeria.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Employee costs

This involves expenses on personnel, and such expenses incurred on the workforce of an organization toward their recruitment, training development, payment of salary and

wages, director emolument, retirement benefits, allowances, welfare care and medical expenditure of staff (Bullen & Eyer, 2013). According to International Accounting Standard 19, employee benefits are all forms of consideration given by an entity to its employees for services rendered by the employees. Employee benefits include benefits provided to either employees or their dependents. It can be paid or settled by cash payments or by provision of goods or services and include salary and wages, retirement benefits, medical care, life insurance, stock options etc.

Salary and wages are payment to the entire workforce of organization. Salary and wages are typically paid to staff in cash or kind. Surbhi (2015), as cited in (Bankole, 2020), defines salary as a fixed sum paid to the employees at regular intervals due to their performance/productivity while wages are payments made on hourly basis to labour for the quantity of work completed daily. Bankole (2020), salary and wages are emphasized by employees because they occupy a venter stage in the scheme of things as regards compensation for work.

Retirement benefits otherwise known as post-employment benefits are paid to the retired employees of organization in form of gratuity and pension and forms part of the responsibilities of employers. The benefits are to assist the employees to alleviate the effects of discontinuity of the regular income of the employee. According to Yusuf (2014) as cited in (Bankole, 2020), the main goal of pension scheme is to ensure that the life of retirees after service are not in danger, because of constraints in finance.

2.1.2 Accounting for employee cost

This is the process of keeping records for all employees associated costs in an organization. this process enables an organization to know how much it expended on employees in an accounting year and equally enables an organization to do an assessment of employees' contributions to organizational goals based on its costs.

2.1.3. Human capital

In the economics literature, human capital refers to the productive capabilities of people: skills, experience, and knowledge have economic value to organizations because they enable it to be productive and adaptable (Becker, 1964). Thus, people constitute the organization's human capital (Bassegy & Arzizeh, 2012). However, there have been controversial issues of human capital reporting on whether its value is relevant to be considered as asset, even though its association with company's expected future benefits is not certain. Some group considered it as what people owned from learning, experience and skill while another group delineated it as human capability that is directly linked to the work (Maani & Jeradat, 2010). Few studies on value relevance of intellectual (human) capital assets include Amir & Lev (1996); Aboody & Lev (1998); Guthrie (2001); Barth, Beaver & Landsman (2001); Kohlbeck (2004); Okwy & Christopher (2010). Human asset or human capital is the 'total knowledge, skills, creative abilities, talent, attitudes, and belief of organization workforce as well as the values, attitude and belief of the individuals involved' (Michael, 2013). Schultz (1985) pointed out that "the acquired skills and knowledge of people are a form of capital

called human capital. Physical and monetary resources by themselves cannot improve efficiency or contribute to an increased rate of return on investment without the human factor (Anjorin, 1992). It is through the combined and concerted effort of people that monetary and material resources are harnessed to achieve organizations goals (Likert & Pyle, 1971). Like other, forms of capital, human capabilities are not free goods. They are the products of allocation of investment in man". This goes to show that human resources are similar to other assets in terms of its acquisition, cost involved and benefits to organization (Schwan, 1976).

2.1.4. Financial performance

Financial performance is the Company's financial condition over a certain period that includes the collection and use of funds measured by several indicators of capital adequacy ratio, liquidity, leverage, solvency and profitability ratio (Didin & Jusni, 2018). Financial performance can as well be viewed as the Company's ability to manage and control its resources to create revenue and profit hence, the financial achievement of the company.

Financial Statements are used to view the financial performance of Companies. These statements consist of the Statement of Financial Position, Income Statement, Statement of Changes in Equity, Statement of Cash flow and the accompany notes to the accounts.

2.2 Theoretical framework

This research work was based on four theories of Human Resource Accounting. These are the human capital theory,

expectancy theory, organizational ecology theory and the Resource based theory. The two theories and their philosophical stance are discussed below. the study was anchored on the human capital theory as it was considered most related to the study.

2.2.1 Human capital theory

Gates (2008) indicates that the concept of “human capital” originates from the legendary works of Adam Smith and other 18th-century economists. Human capital refers to the knowledge, skills, attitudes, aptitudes, and other acquired traits that contribute to production (Goode, 1959 in Fleischhauer, 2007). The discussion on human capital and its impacts on the firm resulted in the emergence of the human capital theory. Literature indicates that human capital theory was propounded by Schultz (1961). Human capital theory explores how individuals and society derive economic benefits from investing in people through training that has positively impacts on the competencies and skills of individuals and the firm (Gates, 2008). The theory has its roots from labour economics and focuses on labour in the quantitative terms (Akindehinde, et al., 2015). The main argument of the human capital theory of Schultz (1961) is that investment in improving the performance of the human being such as the cost of attending a formal school system, structured trainings and workshops, on the job training and other forms of skills and knowledge is a critical capital phenomenon. Thus individuals and the society derive economic benefits from investing in people (Sweetland, 1996). This is because ‘investment in human capital

accounts for most of the impressive rise in the real earnings per worker’ (Schultz, 1961) which has the impact of improving national economic growth. In other words, the welfare of the worker is associated with the level of skills the worker possesses.

The human capital theory argues that the value and earning capacity of the employee has positive relationship with the level of training and skills that the worker has. In other words, the more training and skills a worker acquires, the more his or her value would be and his or her contribution to the firm. Thus, the differential in wages and emoluments of employees is explained by the difference in the skill set of humans. The idea is that individuals can gain skills and competences (human capital) that will make them more productive. And as such be more valuable to the firm. Consequently, capital theory argues in favour of reflecting the value of human resource as an asset in the financial statement of the firm because ‘like other forms of reproducible capital, depreciates, becomes obsolete, and entails maintenance, our tax laws are all but blind on these matters. Further, human capital deteriorates when it is idle because unemployment impairs the skills that workers have acquired. Losses in earnings can be cushioned by appropriate payments but these do not keep idleness from taking its toll from human capital’ (Schultz, 1961).

Another contributor to the human capital theory is Becker (1975). In his essay on how the earnings of the firm are affected by investment in Human Capital, Becker (1975) argues that ‘workers increase their productivity by learning new skills and

perfecting old ones while on the job'. Thus the value of the worker is enhanced by the cost of training, health, and other employee welfare cost. The central argument of Becker (1975) is that a well-trained and employee will possess high level skills that would positively impact on the wealth generation capability of the firm and that human resource can be equated to the physical means of production. Therefore, reflecting human resource cost on the balance sheet of the firm would be a strategic decision since human resource can be equated to the stock of the firm (Canibano & Potts, 2016).

The conclusion argument of the human capital theory is that 'that it is human capital -- the knowledge and skills embodied in people -- rather than physical capital, that is vital to a country's economic prosperity' (Oxley, Le & Gibson, 2008). The relevance of human capital theory to this study is that the theory considers the cost of training employees, and catering for their welfare, and other direct employee cost result in improvement of the performance of the firm. Thus the individual skills and caliber of the human resource is a critical function of the production process of the firm and not the machines only. Therefore, such human resource cost can qualify as investment that should be reflected in the financial statements of the firm.

2.2.2 Resource Based theory

Barney (1991) is one of the major contributors to the field of resource based theory with respect to human resource accounting. According to Barney (1991) the resources of the firm include information,

knowledge, assets, capabilities, organization processes, and a host of other connections that are under the control of the firm which enables the firm to conceive and implement strategies that improves the performance and effectiveness of the firm. In the context of human resource accounting, organizational human capital which is the combination of information, knowledge, training, judgment, intelligence, capabilities, skills and connections provided by the human resource that enables the firm to have competitive advantage over others (Barney, 1991). The central argument of the resource based theory is that given similar level of physical assets, firms would perform differently. The difference is caused by the human energy and capabilities available to the firm (Koch & De Kok, 1999). However, to have the edge over other competitors, the firm 'must implement a value creation strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy' (Barney, 1991).

However, for a resource to provide the firm the competitive edge, Barney (1991) argues that the resource must be: (i) valuable so as to exploit opportunities and neutralize threats in the firm's environment; (ii) it must be rare among a firm's current and potential competition, (iii) it must be imperfectly imitable, and (iv) there cannot be strategically equivalent substitutes for this resources that are valuable but neither rare or imperfectly imitable.

2.3 Empirical review

The following studies were reviewed in the course of conducting this research:

Ekwe (2012) studied the relationship between intellectual capital and financial performance in the Nigeria banking sector. The research adopted multiple regression analysis method for the test of all the hypotheses. The SPSS statistical software (version 17.0) was used for the data analysis. There was a positive significant relationship between components of VAIC and the Return on Assets of the banks in Nigeria. There was also a positive significant relationship between components of VAIC and the Return on Equity of the banks in Nigeria. The study further revealed that there was a positive significant relationship between components of VAIC and employee productivity of the banks in Nigeria. The results also showed that there was no positive significant relationship between components of VAIC and the growth in revenue of the banks in Nigeria. There was a positive relationship between the components of VAIC and market to book value ratio of the banks in Nigeria.

Micah, Ofurum and Ihendinihu (2012) did a study on firms' financial performance and human resource accounting disclosure in Nigeria. Descriptive, correlation and regression statistical techniques were used in analyzing the data. The result revealed that the combined effect of Firm Financial Performance accounted for 75.9% of the variation in Human Resource Accounting Disclosure (HRAD) with an F-ratio 3.581 being significant at 5% confidence level. The positive correlation between Return on Equity (ROE) and Human Resource Accounting Disclosure (HRAD) supposes that an increase in return on equity encourage firm in reporting human capital information so as to establish trustworthiness with

stakeholders; enhance external reputation, appear legitimate in the public eye and avoid cost for non-legitimacy. The study therefore concludes that human resource accounting information of an organization is very relevant for management decision making. Ijeoma, Bilesanmi & Aronu (2013) in their study of the two listed banks, First Bank and Zenith Bank examined the contribution of human resource accounting on the financial statement using the Mantel Test Analysis. The method of data collection used was field survey method which involved the use of questionnaire and interview. The study indicates that there exists a relationship between HRA and firm performance and that HRA has strong impact on the financial performance of the banks.

Prince, Lucky & Kingsley (2013) examined the human resource accounting and its impact on organizational performance. The study made use of cross-sectional data drawn from the Nigerian Stock Exchange fact book (2009). The regression result revealed that human capital and intangible asset had a positive and insignificant impact on organizational performance. Ifurueze, Odesa & Ifurueze (2014) also identified in their study of Beta Nigeria Plc, that changes in profitability can be explained when the expenditure on human resource are segregated into revenue expenditure and capital expenditure. The study recommends, amongst other, that BETA NIG PLC should imbibe the culture of capitalizing and reporting all investment on human resource that improve the quality and productivity.

As noted by Kaplan & Norton (2010), the non-financial indices of customer

satisfaction, reduced rework, skill set of employees, effective internal business processes and innovation affect the financial performance of the firm. Therefore, the effect of HRA on non-financial performance of the firm suggests that HRA would, by extension, affect the financial performance of the firm. In their investigation of how HRA practices affect the performance of the firm, it was discovered that HRA practices affect strategic decision making of the firm and performance to as high a percentage as 67.1 % (Dhanabhakya & Mufliha, 2016). Enyi and Akindehinde (2014) also discovered that HRA affects decision making and enhance corporate goal congruence in their studies of 16 publicly quoted Nigerian Banks. Okpako, Atube and Olufawoye (2014) also in a survey of seven firms quoted on the Nigerian Stock Exchange, investigated the relationship between human capital and the financial performance of seven listed firms in Nigeria. The study used primary data and secondary data. 260 questionnaires were distributed and 246 questionnaires were retrieved on the companies targeted at the staffs of human resource, accounting, and audit/internal control departments which were considered to be the relevant departments for this study. The principles of component analysis were adopted to quantify the responses obtained so as to obtain a series which captured the composite value of the human resource accounting variable. The firm performance indicator considered was (ROE) over the period 2006-2010. The study reveals that human resource accounting variables impacted positively to the level of firm performance.

In their review of 92 empirical studies that examined the relationship between HRA and financial outcomes such as return on equity, return on investment and profit margins (Bernstein & Beeferman, 2015) conclude that there is sufficient evidence of human capital materiality to financial performance to warrant inclusion in standard investment analysis. However, they also find that doing so remains a challenge for a number of reasons including not providing investors with comparable data to a lack of consensus over which combinations of policies have the most impact on financial outcomes. Akindehinde, Enyi and Olutokunbo (2015). Discovered in their study of the eighteen publicly quoted Nigerian banks as at indicates that human asset accounting significantly affects the banks 'performance at F-ratio = 56.280, $P \leq 0.05$, $R^2 = 0.193$. It concluded that capitalizing human assets would positively impact on performance of organizations and recommended its disclosure as intangible asset in the balance sheet. The study adopted an Ex-post facto research design, and the instruments of data collection were questionnaires designed on a 6 Likert Rating Scale. Adopting a convenience sampling method, these were administered on the banks' head office staff of Human Resource, Accounting, and Audit/Internal Control Departments which were considered to be the most relevant departments for the study. A total of 238 were returned out of 400 questionnaires administered representing approximately 60%. The method of analysis was the simple regression analysis model in Statistical Package for Social Sciences (SPSS).

Ikpefan, Kazeem and Taiwo (2015) studied the impact of human capital on the performance of Nigerian Micro-finance Banks, with particular reference to those in Ogun State. A purposive sample of Sixteen (16) Micro finance banks out of the thirty-four (34) existing in Ogun state was investigated. Random sampling technique is used to select respondents in each Micro Finance Banks cutting across directors, employees and shareholders of the Micro Finance Banks. A total of 320 collected questionnaires were used for data analysis. The data were analysed using (parametric and non-parametric techniques) appropriate descriptive and inferential statistical techniques. A total of 314 of the sample (representing 98.4% of the sample) agreed that human resources expenditure should be capitalized and treated as assets rather than write off to profit and loss accounts. The study also shows that human capital development has positive and significant impact on overall performance of MFBs in Ogun State. Specifically, employees' compensation in terms of salaries, wages and staff training and development has positive and significant impact on the survival and overall performance of MFBs in Ogun State. Amahalu, et al (2016) also corroborated the findings in their study of the financial performance of deposit money banks listed on the Nigeria Stock Exchange from 2010-2015. Ex-post fact research design was adopted for the study. Secondary data were sourced from the publications of Nigeria stock exchange. Inferential statistics of the hypotheses were carried out with the aid of STATA 13 statistical software using Co-efficient of correlation and Ordinary Least

Square (OLS) regression analysis. Findings of the study a positive and statistically significant relationship between human capital and the financial performance in terms of return on assets (ROA), return on equity (ROE) and on market-to-book value (MBV) at 5% significance level.

Also in their exploratory study on the impact of HRA on organizational performance, adopting qualitative analysis, Kumar & Priyanka (2018) found that that human resource accounting has positive impact on organizational performance. As such investment in Human resource should be treated as assets to the organization since such investment always adds value to the organization. In his study of fifty listed manufacturing firms for the period 2007-2014, Olayiwola (2016) indicate that human capital cost has a positive and a substantial relevance to share price. The findings suggest that capitalization of corporate investment on its human resource, an approach that can potentially increase the shareholders' fund and also capable of creating a favorable image for quoted manufacturing companies in Nigeria.

In their study to determine the extent to which human resource influence the firms' profit after tax, total revenue and net asset, using the contents of the annual reports of 10 listed firms for the period 2011 – 2015, Onyinyechi and Ihendinihu (2017) also identified a positive relationship between HRA and the affirmance of the firm, although it revealed an inverse relationship with respect to the Net asset. The inverse relation was said to result from the non-inclusion in the financial statements of the investment in human

resource. Time Series Annual data was employed ranging from 2011 - 2015 with a sample size of 10 firms. The research instruments used in collection of data for this study were mainly secondary data from the NSE Website and Annual reports published by the selected Firms. The hypotheses formulated were tested at 5% level of significance using SPSS software and multiple regression analysis as the statistical tool. The study revealed that human resource in organizations contributes positively to their financial growth as evidenced by the positive impact on PAT.

Olajide et al. (2018) in their study of 20 listed manufacturing and non-manufacturing firms in Nigeria between 2011– 2015 indicate a positive co-efficient value of 0.565 between HRA and firm performance. They suggest that the listed firms should imbibe the culture of capitalizing and disclosing all the expenditure on human resource so as to improve the productivity of the firms. Also, Okpala and Chidi (2010) in their sample of 65 listed firms, their investigation reveals that the quality of human capital is a major factor in determining the value of a firm's stock and investment decisions and that the quality of management and employees are key factors in investment decisions.

Ogbodo and Egbunike (2016) studied relationship between HRA of Banks and Insurance Companies as shown on the Nigerian Stock Exchange Fact book for 2011/2012 and 2012/2013. Result shows that there is a significant relationship between human resource performance ratios and return on assets; and the net profit margin. Amahalu et al. (2016) also identified a

positive relationship between HRA and the equity and market-to book value of banks listed on the floor of Nigeria Stock Exchange from 2010-2015 when measured at 5% significance level. Ofurum and Adeola (2018) study using staff remuneration, as proxy for Human Resource Accounting net operating profit and return on capital employed were as proxies for profitability, showed no significant relationship between HRA and firm profitability. The researchers conclude however that the result indicate that employees were not well compensated and advised staff should be well compensated for better firm performance. This conclusion is in line with the philosophical stance of HRA.

Hamid, Maheen, Cheem and Yaseen (2017) in their study of the effect of human resource development and compensation on the performance of telecommunication companies in Pakistan, using the exploratory factor analysis carried out on 200 employees of Ufone and Mobilink franchises in Sargodha city, in Pakistan, that employee development is positively associated with organizational performance. The instrument used in conducting the study is the questionnaire technique on 5 likert scale. The variables used for the study include employee's development, and compensation management and their combine effect on organizational performance. Of the three hypothesis tested by the study include confirming that there is a positive relationship between employee's development and organizational performance. One of the findings of the study that is pertinent to this study as employee development is positively insignificant with t value of 0.598 and therefore impacts

positively on the performance of the firm. Oko (2018) study human asset accounting and its impact on the performance and financial position of firms. The study adopted the survey research design. The instrument of data collection was questionnaire designed on a four step Likert Scale. The hypotheses were tested using simple regression model. The result of the analyses confirmed that there is a significant relationship between Human Asset Accounting and Corporate Profitability and there is positive significant relationship between Human Asset

Accounting measurement and corporate financial position. The study concluded that capitalizing human assets would positively impact on performance and financial position of organizations and recommended its disclosure as intangible asset in the balance sheet

As can be seen from the synthesis of empirical literature discussed above, the importance of human capital in the financial performance of the firm has been established indicating positive relationship with respect to major financial performance indicators of ROE, ROA. The evidence cuts across all shades of firms and industrial sectors. This suggests that the importance of human capital, as a growth factor, permeates all organisations.

3.0 METHODOLOGY

This study adopted the ex-post facto research design which uses mainly secondary data as contained in the published annual reports of the sample listed firms without modification. The choice of the design is relevant because

the study involves events that have already taken place in the past.

The Population of this study was made up of the 26 listed manufacturing firms in the consumer goods subsector as at 31st December, 2022.

The sample size was drawn out of the population size of 26 firms and only those with the complete annual reports containing the disclosure of the variables under study were considered for the study. Thus a total of ten firms, whose annual reports disclosed the variables under consideration, were analyzed. Judgemental sampling technique was adopted. Secondary data obtained from the annual reports of firms were the main source of data.

Definition of variables and model specification

The study used three sets of variables: dependent, independent and control variables, representing performance, employee benefits, and control variables respectively.

3.1 Performance variables (dependent variables)

The ROA is the performance variable used as the dependent variable of this study. For this study ROA is defined as profit after tax minus preferred dividend divided by book value of equity at the end of each financial year (Ichsani & Rinta, 2015) as follows:

3.2 Net Profit after interests, taxes and Preference Dividend Book Value of Assets

It is expected that firms that have invested in human capital and adopt effective human capital/human resource accounting will have

better ROA than those without since ROA is a reflection of the optimal performance of the firm which will result from the effective deployment of human resources.

Accounting for Employee costs variables (independent variables)

The independent variables considered in this study were the various values and

aggregation of employee benefits which can be categorized into three: salaries and wages (SAW) employee retirement benefits (ERB) and Other Employee Welfare Benefits (OWB). Thus, each firm's details are summarized as shown below per year and presented in a panel data format:

Table 1: Variable Specification and Measurement

Variable Specification	Type of variable	Measurement
Return on Assets (ROA)	Dependent Variable	PAIT/Assets×100
Salaries and wages (SAW)	Independent Variable	Salaries and Wages as reported.
Employee Retirement benefits (ERB)	Independent Variable	Contributions to defined benefits scheme and other long term employment benefits as reported.
Other Employee Welfare Benefits (OWB)	Independent Variable	Medical expenses, Equity settled share based payment transactions and other personnel expenses as reported.
Firm Size	Control Variable	Total Assets

Source: Researcher's review 2024

The values of these variables are obtained from the notes to the financial statements where the values of such variables are not obvious on the financial statements of the firm.

3.3 Model Specification

The multi-regression equation adopted as a model for the study was of the form:

$$Y_{it} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_n X_{ni} + e_t$$

Where:

Y_{it} = Performance indicator of the firm I at time t (dependent variable),

α = α , is the intercept which represents the expected value of Y_i when X_1, X_2, \dots, X_n are all equal to zero.

$\beta_1 \dots \beta_n$ = Coefficient in the value of Y_i as the independent variables change.

X = Independent variables.

Adapting the general multi-regression model to this study, the different performance values

of the sample firms have the following relationships:

$$ROA_{it} = \alpha + \beta_1 SAW_{it} + \beta_2 ERB_{it} + \beta_3 OWB_{it} + \beta_4 FSIZE_{it} + \epsilon_{it}$$

Where:

ROA = Return on Assets

SAW = Salaries and Wages

ERB = Employee Retirement Benefits

OWB = Other Welfare Benefits

FSIZE = Firms Size

3.4 Method of Data Analysis

Various techniques of data analysis are utilized to achieve the research objectives. Descriptive statistics is used to highlight the salient features of data collected. The Hausman test is deployed to determine which of the effect models is best suited for the sampled data. The study used the ordinary least square (OLS) estimation technique of regression together with fixed effects model (FEM) to accommodate data heterogeneity. To ascertain multicollinearity, Pearson correlation and Variance Inflation Factor

(VIF) tests were carried out while the Breusch-pagan/Cook-weisberg test was used to test for heteroscedasticity.

STATA version 14 was used for data analysis. The hypotheses were tested at 5% level of significance.

4.0 Data Analysis

4.1 Descriptive Statistics

This sub-section provides descriptive statistical analysis of the data generated on the dependent and explanatory variables of the study. It provides the summary statistics of the collected data which include measures of central tendency, such as mean, measures of dispersion (the spread of the distribution), such as the standard deviation, minimum and maximum of the dependent, explanatory and control variables. The descriptive statistics as presented in Table 4 shows the summary of five years mean and standard deviations as well as maximum and minimum values for the variables employed in the study.

Table 4.1: Descriptive Statistics

Variables	Obs	Min	Max	Mean	Std. Dev
ROA (%)	50	-100.03	85.64	19.68	26.66
SAL (₦'000s)	50	157963	31500000000	7065453	8019766
ERB (₦'000)	50	10227	4734520	1223852	1318789
OWB (₦'000)	50	-33607	9118132	1864474	2667787
SIZE (₦'000)	50	3266615	389000000000	126000000000	112000000000

Source: STATA version 14.2 result output

As observed on the table above, return on Asset (ROA) for sampled manufacturing

Companies in Nigeria has mean value of 19.68% while the maximum and minimum values were 85.64% and -100.03% respectively. The results implied that ROA ranges from -100.03 to 85.64% with mean value of 19.68%. The standard deviations were 26.66%.

The results of descriptive analysis on Companies Salaries and Wages (SAW) for the period of five years for the overall sampled Manufacturing Companies revealed the mean of ₦7,065,453,000.00. The maximum and minimum values were ₦31,500,000,000.00 and ₦157,963,000.00 respectively with the standard deviation of ₦8,019,766,000.00. The results implied that SAW ranges from ₦157,963,000.00 to ₦31,500,000,000.00 with the mean value of ₦7,065,453,000.00 and standard deviation of ₦8,019,766,000.00.

Also, Employee Retirement Benefits (ERB) has mean value of ₦1,223,853,000.00 while the maximum and minimum values were ₦4,734,520,000.00 and ₦10,227,000.00 respectively with the standard deviation of ₦1,318,789,000.00. The results implied that ERB ranges from ₦10,227,000.00 to ₦4,734,520,000.00 with the mean value of ₦1,223,853,000.00 and standard deviation of ₦1,318,789,000.00.

Finally, Other Employee Welfare Benefits of the sampled Manufacturing Companies revealed the mean of ₦1,864,474,000.00. The maximum and minimum values were ₦9,118,132,000.00 and (₦33,607,000.00) respectively with the standard deviation of ₦2,667,787,000.00. The results implied that SAW ranges from (₦33,607,000.00) to

₦9,118,132,000.00 with the mean value of ₦1,864,474,000.00 and standard deviation of ₦2,667,787,000.00.

4.1.1 Robustness Tests

The robustness test is conducted in order to ensure the validity of all statistical inferences for the study, so as to assess the impact of distribution problems, in addition to the problems of outliers before deciding on the appropriate statistical method to use. Regression which is an example of a parametric test, requires large data and other assumptions to be satisfied. If this is not the case, then the results are likely to be spurious. This study checked for, normality, multicollinearity, homoskedasticity. In addition to the classical regression assumptions, the results of Hausman test to decide between Fixed-Effects (FE) and Random-Effects (RE) is also conducted and reported in this section since the data is panel in nature.

4.1.2 Test for data normality

The results of skewness and kurtosis tests are presented in Table 4.2 below.

Skewness means lack of symmetry. A distribution is said to be symmetrical when the values are uniformly distributed around the mean. For a symmetric distribution $S_k = 0$. If the distribution is negatively skewed then S_k is negative and if it is positively skewed then S_k is positive. The range for S_k is from -3 to +3.

From the table below, the coefficients of skewness of the variables under study are

near zero meaning that the distribution is uniformly distributed.

More so, for large observations Ghasemi and Zahediasl (2012) suggest that researchers should not bother much about slight

deviations from normality. Their conclusion was in tandem with the central limit theorem which holds that in large samples ($x's > 30$ per observation in multiple regression) the sampling distribution will also tends to be normal regardless of the shape of the data.

Table 4.2 Results of Skewness and Kurtosis Analysis

Variable	Obs.	Pr(skewness)	Pr(kurtosis)	Adj chi2 ⁽²⁾	prob>chi2
logROA	50	0.1603	0.8966	2.09	0.3511
LogSAW	50	0.2881	0.1928	2.99	0.2244
LogERB	50	0.1733	0.0996	4.60	0.1003
LogOWB	50	0.3864	0.0519	4.57	0.1018
LogTotal Assets	50	0.1149	0.6921	2.79	0.2474

Source: Summary of STATA Version 14.2 output

4.2 Multicollinearity test

To ascertain multicollinearity, Pearson correlation and Variance Inflation Factor (VIF) tests were carried out. Result of multicollinearity is reported in Table 4.3. An important assumption for the multiple regression model is that independent variables are not perfectly multicollinear. When multicollinearity is present standard errors are inflated. The rule-of-thumb is that $VIF > 10$ indicate multicollinearity. Since VIF for the variables ranges from 1.65 – 9.52 the independent variables are not strongly (perfectly) correlated, meaning that no one independent variable does influence the other independent variables. If the inverse of VIF (tolerance) is used it can be concluded that

the least uniqueness of the variables ranges from 0.105038(1/9.52) to 0.604324(1/1.65).

Table 4.3 Multicollinearity Tests Results

Variable	VIF	1/VIF
Log SAW	9.52	0.105038
Log ERB	5.25	0.190477
Log Total Assets	4.76	0.210141
Log OWB	1.65	0.604324

Mean VIF = 5.30

An average VIF of 5.3 is less than 8 which suggest the absence of multicollinearity.

Table 4.4: Correlation Matrix

	ROA	SAW	ERB	OWB	SIZE
ROA	1.0000				
SAW	-0.2084	1.0000			
ERB	-0.3067	0.8911	1.0000		
OWB	0.4142	0.3999	0.3205	1.0000	
SIZE	-0.0715	0.8294	0.6715	0.6014	1.0000

Source: STATA version 14.2 Output

Table 4.4 reports the Pearson correlation matrix for all the variables. Pearson correlation coefficient can range from -1 to +1. Low correlation coefficients (i.e., within the range of -0.8 to + 0.8) between the predictors variables is preferable as a rule-of-thumb. The closer the coefficient to ± 1 means strong correlation. Strong correlations among predictors affect the standard errors of the estimated coefficients and also the sign of the estimated coefficients causing a problem in the interpretation of the regression results.

The highest Pearson correlation coefficient from Table 4.4 between predictor variables is 0.8911 (between ERB and SAW). Although the pearson moment correlation matrix is more than 0.8, the corresponding VIF is 5.30, this low VIF indicate that independent variables are not highly collinear to bias the estimates.

4.3 Test of Heteroskedasticity

The result of Breusch-pagan/Cook-weisberg test for heteroskedasticity reveals that errors have constant variance (Non-heteroscedastic), which indicates that the

OLS estimators will have the minimum variance of all unbiased estimators, and also the P-values will be reliable.

4.4 Hausman Specification Test

The role of hausman test is to check for strict exogeneity, and result of the test reveals that the two models (Fixed and random effect) are correlated with chi-square probability (p-value) of 0.7214. This means that the random effect results are favoured in this study and are, therefore used (See Appendix 2).

From the results of the robustness tests performed to determine the accuracy and reliability of research data used in testing the study hypotheses, it shows that the data is free of regression errors capable of invalidating the research's regression assumptions. In other words, the data is suitable and the regression estimates obtained are reliable.

5.0 Discussions of Results

This subsection presents the results of the analysis conducted on the data collected from the annual reports and accounts of the

sampled consumer goods firms for the period of the study. It presents the regression results of the study.

5.1 Random effect regression results

This sub section presents and interprets the results obtained from the test of the research hypotheses. All the study hypotheses are tested using fixed effect regression model. The regression result of the fixed effect estimation technique is presented in Table 4.5. The summary of the regression results is obtained based on this model of the study.

Multiple linear regression method of analysis is used in this study for assessing the strength of the effect of each set of explanatory variables known as independent variables and a single response or dependent variable.

Table 4.5: Regression results

	Coeff.	t	P-value
SAW	0.2675378	1.10	0.276
ERB	-0.3564019	-2.31	0.026
OWB	0.3005017	4.78	0.000
SIZE	-0.3524591	-1.65	0.106
R ²	0.4218		
F-Value	8.21		
Hausman Test	0.7214		

Statistically significant at 5%

Source: STATA version 14.2 Output

The F-test is a global test of hypotheses that none of the explanatory variables are related to the dependent variable, in other words, that R² is not zero. Table 4.5 reports a significant F- statistic, indicating that using the model is fit and can be used for data analysis. The F-Value is 8.21 with a probability of 0.0000

R- Square (called the coefficient of determination) from Table 4.5 indicates the proportion of the variance of ROA that is explained by variation in the predictor variables. To interpret the variability in ROA accounted for by the models, the R-square is used. The Model gives the R-squared (R² = 0.4218). Thus, the model is predicting about 42% of the variability in ROA. Overall, the R-squared reports the strength of the relationship between the model and the dependent variable.

The effect of individual employee costs variables on the financial performance (ROA) and the confidence with which the researcher can support his claims is also reported in Table 4.5. The output shown in this table provides estimate of the unstandardized coefficients, standard errors of the estimates, t-tests that a coefficient takes the value zero, and confidence intervals. The estimated regression coefficients are given under the heading “Coef.”; these give, for each of the explanatory variables, the predicted change in the ROA when the explanatory variable is increased by one-unit conditional on all the other variables in the model remaining constant. The confidence intervals provide a range of values within which the researcher can assert with a 95% level of confidence that the estimated coefficient lies.

The coefficient of estimates (b-values) indicates the individual contribution of each predictor to the model.

From the estimated model, the coefficient of SAW (Salaries and Wages) is which depicts that a unit increase in SAW will lead to 0.2675378 units increase in ROA in the manufacturing companies in Nigeria provided that the individuals companies have the same level of all other accounting data. This results will be valid at 95% level of confidence.

Similarly, the study estimate that a unit increase in Employee Retirement Benefits (ERB) holding all other variables constant will lead to -0.3564019 units increase in ROE of the manufacturing companies in Nigeria. The regression coefficient according to Tables 4.5 is reliable within the 95% confidence level or in other words, the more ERB of the manufacturing companies in Nigeria, the less the ROA vis-à-vis the financial performance of companies in the industry.

The third and final employee cost variable used in this study is Other Employee Welfare Benefits (OWB). Result in Table 4.5 indicates that one-unit increase in OWB leads to 0.3005017 units increase in ROA all other things being equal.

For this study model, Salaries Wages (SAW) with a coefficient of 0.2675378, t-value of 1.10 and p-value of 0.0276, SAW is statistically significant at 5% level of significance and thus have significant effect on the financial performance of listed

manufacturing consumer goods companies in Nigeria.

The regression result for Employee Retirement Benefits (ERB) with a coefficient of -0.3564019, t-value of -2.31 and P-value of 0.026 shows that ERB is statistically significant at 5% level of confidence. This implies that ERB does significantly affect financial performance.

In the same vein, Other Employee Welfare Benefits (OWB) has a coefficient of 0.3005017, t-value of -4.78 and p-value of 0.000. This result indicates that OWB is statistically significant at 5% level of significance and that OWB has significant effect on the financial performance (ROA) of sampled manufacturing companies.

Similarly, table 4.5, shows that firm size (Total Assets) has a coefficient of -0.3524591 and a t-value of -1.65. The P-value stands at 0.106, indicating that Total Assets is statistically insignificant at 5% level of significance and that Total Assets has a significant effect on the financial performance (ROE) of sampled manufacturing companies.

5.2 Test of Hypotheses

Three hypotheses were stated for empirical testing in chapter one; under this section, the hypotheses are re-stated and empirically tested using the t-test statistics and the p – values that is associated with each variable.

The first hypothesis is set out to examine the effect of Salaries and Wages (SAW) on the financial performance of listed consumer goods firms in Nigeria. For clarity and

simplicity, the hypothesis is re-stated as follow:

H₀₁: Salaries and Wages (SAW) have no significant effect on the financial performance of listed Manufacturing Consumer Goods Companies in Nigeria.

The results of data analysis suggest that Salaries and Wages have significant effect on the financial performance of listed manufacturing consumer goods companies in Nigeria.

The next hypothesis in this study tests whether Employee Retirement Benefits (ERB) have a significant effect on the financial performance of listed manufacturing consumer goods companies in Nigeria. The hypothesis is re-stated to guide the analysis as follows:

H₀₂: Employee Retirement Benefits (ERB) has no significant effect on the financial performance of listed Manufacturing Consumer goods Companies in Nigeria.

The results of data analysis suggest that Employee Retirement Benefits have a significant effect on the financial performance of listed consumer goods firm in Nigeria.

The third hypothesis tests whether Other Employee Welfare Benefits have a significant effect on the financial performance of listed manufacturing consumer goods companies in Nigeria. The hypothesis is re-stated as:

H₀₃: Other employee Welfare Benefits do not have significant effect on the financial performance of listed Manufacturing Consumer goods Companies in Nigeria.

From the results of data analysis presented above, Other Welfare Benefits do have a significant effect on the financial performance of listed manufacturing consumer goods companies in Nigeria.

5.3 Discussion of Findings

This section focuses on the empirical findings from the study on effect of accounting for employee cost on the financial performance of listed manufacturing consumer goods Companies in Nigeria to achieve the research objectives.

The study investigated the effect of Salaries and Wages, Employee Retirement Benefits and other Welfare Benefits on financial performance of listed manufacturing consumer goods companies in Nigeria. The study found out that there is significant effect that Salaries and Wages, Employee Retirement Benefits and Other Welfare Benefits have on the financial performance of listed manufacturing consumer goods companies in Nigerian. Table 4.5 shows the results of the regression Effect of the independent variables on the Return on Assets of the sampled companies. In this table, Salaries and Wages, and Other Employee Welfare Benefits have positive significant effect on the financial performance vis-à-vis the Return on Assets of listed manufacturing consumer goods companies in Nigeria while the Employee

Retirement Benefits have a negative or inverse relationship with dependent variable, Return on Assets.

Total assets were used as a control variable in the study. The regression results as shown in table 4.5 revealed that Total Assets of the sampled manufacturing consumer goods companies in Nigeria has a significant effect on the financial performance. However, the regression coefficient is negative indicating an inverse relationship between Total Assets and Return on Assets. The findings of the study agree with that of Onyiyechi & Ihendinihu (2017). In their study to determine the extent to which Human Resource Accounting influence the firms' profit after tax, total revenue and net assets, using the contents of the annual reports of listed firms for the period of 2011 to 2015, it was revealed that Human Resource in Organizations contribute positively to their financial performance as evidenced by the positive impact on profit after tax. In a like manner, Micah, Ofurum and Ihendinihu (2012) did a study on firms' financial performance and human resource accounting disclosure in Nigeria. The study revealed positive correlation between Return on Equity (ROE) and Human Resource Accounting Disclosure (HRAD). More so, Ekwe (2012) studied the relationship between intellectual capital and financial performance in the Nigeria banking sector. The study shows a positive significant relationship between components of Intellectual Capital and the Return on Equity of the banks in Nigeria. Akindehinde, Enyi and Olutokunbo (2015), discovered in their study of the eighteen publicly quoted Nigerian banks as it indicates that human asset accounting significantly affects the

banks 'performance which also agree with findings of this study. In line with the findings of this study, (Bernstein & Beeferman, 2015) conclude that there is sufficient evidence of human capital materiality to financial performance to warrant inclusion in standard investment analysis.

The results of the study also aligned with that of Ikpefan, Kazeem and Taiwo (2015). They studied the impact of human capital on the performance of Nigerian Micro-finance Banks, with particular reference to those in Ogun State. The study also shows that human capital development has positive and significant impact on overall performance of MFBs in Ogun State. Specifically, employees' compensation in terms of salaries, wages and staff training and development has positive and significant impact on the survival and overall performance of MFBs in Ogun State. Amahalu, et al (2016) also corroborated the findings in their study of the financial performance of deposit money banks listed on the Nigeria Stock Exchange from 2010-2015. Findings of their study reveal a positive and statistically significant relationship between human capital and the financial performance in terms of return on assets (ROA), return on equity (ROE). Okpako, Atube and Olufawoye (2014) also in a survey of seven firms quoted on the Nigerian Stock Exchange, investigated the relationship between human capital and the financial performance of seven listed firms. The firm performance indicator considered was Return on Equity over the period 2006-2010. The study reveals that human resource accounting

variables impact positively on the level of firm performance.

However, the findings of the study negate that of Ofurum and Adeola (2018). In their study using staff remuneration, as proxy for Human Resource Accounting net operating profit and return on capital employed were as proxies for profitability, the result showed no significant relationship between HRA and firm profitability. The differences could be attributed to variation in the methodologies adopted for the study.

6.0 Summary of findings

The findings of this study were summarized as follows:

- (i) Salaries and Wages have a positive and significant effect on the financial performance of listed manufacturing consumer goods companies in Nigeria.
- (ii) Employee Retirement Benefits have a significant effect but negative effect on the financial performance of listed manufacturing consumer goods companies in Nigeria.
- (iii) Other Employee Welfare Benefits have a significant and positive effect on financial performance of listed consumer goods companies in Nigeria.

7.0 Conclusions

Based on the findings summarised above, this study concluded that accounting for

employee cost have significant effect on financial performance of listed manufacturing consumer goods companies in Nigeria. Specifically, the results of the study indicated that Salaries and Wages, and Other Employee Welfare Benefits have significant and positive effect on Return on Assets. Employee Retirement Benefits have a significant but negative effect on Return on Assets.

Recommendations

Based on the findings of this study, the following recommendations were made:

- i) Management of companies should ensure proper accounting for the cost of employees as it influence the financial performances of firms
- ii) Employees retirement benefits should be properly planned and provided for in the records of companies since labour plays a significant role as a factor of production
- iii) Provisions should always be made for other employees benefits as it will serve as motivation in encouraging them to put in their best for higher output for higher profits

References

- Aboudy, D. & Lev, B. (1998). "The Value Relevance of Intangibles: The Case of Software Capitalization," *Journal of Accounting Research*, 36(3): 161-169
- Abubakar, S. (2009). A critique of the concept of human resource accounting.

- Nigerian Journal of Accounting and Finance, 1(1): 93-104
- Adebawojo, O A, Enyi, P. E. & Adebawo, O. O. (2015), "Human Asset Accounting and Corporate Performance". American International Journal of Contemporary Research, 5(1): 45-52
- Adenike, M. O. & Sheriffdeen, A. T. (2017). Human Capital Variables and Economic Growth in Nigeria: An Interactive Effect. Euro Economica, 1(36):131-143
- Afiouni, F. (2007). Human resource management and knowledge management: a road map toward improving organizational performance. Journal of American Academy of Business, 11(2): 124–31
- Ahmed, I. (2010). Effects of Motivational Factors on Employees Job Satisfaction a Case Study of University of the Punjab, Pakistan. International Journal of Business and Management, 5(3):70-81
- AICPA (1994). Improving Business Reporting—A Customer Focus: Meeting the Information Needs of Investors and Creditors, Comprehensive Report of the Special Committee on Financial Reporting. The Jenkins Report, American Institute of Certified Public Accountants, New York, AICPA
- Akindehinde, A. O., Enyi, P. E., & Olutokunbo, A. O., (2015). Human assets accounting and corporate performance. American international journal of contemporary research, 5(1), 70-78
- Akrani, G. (2011). Relationship Between Stress and Job Performance. Online at <http://kalyan-city.blogspot.com/2011/03/relationship-between-stress-and-job.hotmail>. [Accessed: 9th June, 2019]
- Amahalu, N. N., Abiahu, M. C., Chinyere, J. & Elochukawu, O. C. (2016). Effect of human resource accounting on financial performance of quoted deposit money banks in Nigeria. The Journal of International Accounting, 1: 13-22
- American Accounting Association Committee of Accounting for Human Resources (1973). Report of the Committee on Human Resource Accounting. The Accounting review Supplement, 48: 169–185
- Amir, E. & Lev, B. (1996). Value-Relevance of Nonfinancial Information: The Wireless Communications Industry. Journal of Accounting and Economics, 22: 3-30
- Andrade, P. & Sotomayor, A.M. (2011). Human Capital Accounting-Measurement Models. International Journal of Economics and Management Sciences, 1(3): 78-89
- Anjorin, D. (1992) "Compensation Scheme in the Public Sector" In: New Trends in Personnel Management: A book of Readings. Yahaya, A.D. and Akinyele, C.T. (ed). Lagos, Administrative Staff

- College of Nigeria, Badagry, pp.163-173
- Armstrong, M. & Baron, A. (2002).** Strategic HRM: The Key to Improved Business Performance (Developing Practice). Dunfermline, Chartered Institute of Personnel & Development, 280pp
- Armstrong, M. & Baron, A. (2003). Managing Performance: Performance in Action.... Wimbledon, CIPD, 192pp
- Asika, E., Chitom, J., & Chelichi, I. (2017). Appraisal of Human Resource Accounting on Profitability of Corporate Organization. *Economics*, 6(1):1-10.
- Babbie, E. R. (2010). The practice of social research (12th ed.). Wadsworth, Belmont, 530pp
- Bankole, T. (2020). Human Resource Costs' influence on Financial Performance of Nigerian Consumer Goods Company. *American International Journal of Business Management*, 3(3): 31-41
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1): 99-120
- Bartha, M. E., Beaver, W. H. & Landsman, W. R. (2001). The relevance of the value relevance literature for financial accounting standard setting: another view. *Journal of Accounting and Economics*, 31: 77-104
- Bassey, E. B. & Arzizeh, T. T. (2012). Capitalized human resources cost and its influence on corporate productivity: A study of selected companies in Nigeria. *International Journal of Financial Research*, 3(2):48-60
- Becker, G.S. (1964). Human Capital: A Theoretical and Empirical Analysis, with special reference to Education. New York: NBER. Available at <https://ssrn.com/abstract=1496221>
- Becker, G.S. (1975). 'Human capital and the personal distribution of income: an analytical approach'. In: Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education (2nd ed.). New York: National Bureau of Economic Research, pp13 – 44
- Becker, G.S. (2002). The age of human capital. In: Lazear, E.P. (ed.) Education in the twenty-first century. Palo Alto, CA: Hoover Institution Press, pp3-8.
- Bernstein, A. & Beeferman, L. (2015). The Materiality of Human Capital to Corporate Financial Performance. Available at SSRN: <https://ssrn.com/abstract=2605640> or <http://dx.doi.org/10.2139/ssrn.2605640>
- Bjurström, E., Catusus, B., & Johanson, U. (2003). E*KNOW-NET Work Package 2-Intellectual capital statements in firms. United Kingdom, European Research Arena on Intangibles

- Boarini, R. & Mira d'Ercole, M. & Liu, G (2012). "Approaches to Measuring the Stock of Human Capital: A Review of Country Practices", OECD Statistics Working Papers, 2012/04. Paris, OECD Publishing, available at <http://dx.doi.org/10.1787/5k8zlm5bc3ns-en>,"
- Boedker, C., Guthrie, J. & Cuganesan, S. (2005). An integrated framework for visualising intellectual capital. *Journal of Intellectual Capital*, 6(4):510-527
- Bruce, C. (2001) "Interpreting the scope of their literature reviews: significant differences in research students' concerns", *New Library World*, 102(4/5): 158-166
- Bullen, M. L. & Eyley, K. (2013). Human Resource Accounting and International Developments: Implications for Measurement of Human Capital. *Journal of International Business and Cultural Studies*, 1, 1-16
- Buta, S. (2015). Human capital theory and human resource management: implications in development of knowledge management strategies. ***Ecoforum Journal*, 1(6): 155-162**
- Canibano, C. & Potts, J. (2016). Toward an Evolutionary Theory of Human Capital. Available:SSRN: <https://ssrn.com/abstract=2802236> or <http://dx.doi.org/10.2139/ssrn.2802236>
- Cherian, J. & Farouq, S. (2013). A Review of Human Resource Accounting and Organizational Performance. *International Journal of Economics and Finance*, 5(8): 74-84
- Coff, R. (1997). Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-Based Theory. *Academy of Management Review*. 22: 374-402
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). CA: Sage, Thousand Oaks, 260pp
- Dash, S. (2012). Human Capital Management (HCM): The evolution of the field. *BIZCRAFT*, 6: 50-66
- Delavaripour, J. & Alishiri, M. (2016). Valuation of human resources in organization. *Management Issues in Healthcare System*, 2: 4-16
- Dhanabhakya, M. & Mufliha, S. (2016). Impact of human resource accounting system on the decisions making areas of human resource management practices. *International Journal of Applied Research*, 2(5): 505-508
- DMSTI (2003a). *Analyzing intellectual capital statement*. Copenhagen, Danish Ministry of Science, Technology, and Innovation.
- DMSTI (2003b). *Intellectual Capital Statements – The New Guideline*. Copenhagen, Danish Ministry of Science, Technology, and Innovation

- Dumitrana, M., Galvan, M. & Dumitru, M. (2009). Pleading for the management controller profession in the trade area. *The Amfiteatru Economic journal*, 11: 91-102.
- Egbunike, C. F. & Ogbodo, O. (2015). The Influence of Cultural Values on Accounting Practice in Nigeria. *Developing Country Studies*, 5 (3): 110-121
- Enyi, P. E. & Akindehinde, A. O. (2014). Human Resource Accounting and Decision Making in Post-Industrial Economy. *International Journal of Accounting and Taxation*, 2(1): 19–35
- Fagbohunge, T. (1993). *Pen at gunpoint: The travails of press freedom in the world*. Lagos: Solubat Press Limited
- FASB. (2001). *Improving business reporting: Insights unto enhancing voluntary disclosures*.
Online:<http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175819611134&blobheader=application%2Fpdf>
- Flamholtz E.G (1972). Towards a theory of human resource value in formal organizations. *The accounting review*, 47:666-678
- Flamholtz, E. G. (1971). A Model for Human Resource Valuation: A stochastic Process with Service Rewards. *The Accounting Review*, 46(2):253-267
- Flamholtz, E. G., Bullen, M. L., & Hua, W. (2002). Human resource accounting: a historical perspective and future implications. *Management Decision*, 40(10): 947-954
- Flamholtz, E.G. (1999). *Human resource accounting: advances in concepts, methods, and applications* (3rd ed.). Springer, 390pp, ISBN-13: 978-0792382676
- Flamholtz, E.G., Kaman-Narasimhan, R., & Bullen, M.C. (2004). Human resource accounting today: Contributions, controversies and conclusions. *Journal of Human Resource Costing and Accounting*, 8, 23-37.
- Fleischhauer, Kai-Joseph (2007) *A Review of Human Capital Theory: Microeconomics* January 2007 Discussion Paper no. 2007-01, Department of Economics University of St. Gallen, Available at <http://www.vwa.unisg.ch>. Accessed on 27/4/2019.
- Gavrea, C., Ilies, L. and Stegorean, R. (2011) *Determinants of Organizational Performance: The Case of Romania. Management & Marketing Challenges for the Knowledge Society*, 6: 285-300
- Gates, Stephen (2008) *Strategic Human Capital Measures Orientation, Accountability, and Communication* (online). Available at www.conference-board.org/hcmreport. Accessed on 1/5/2019

- Guthrie, J. & Petty, R. (2000). "Intellectual capital literature review: Measurement, reporting and management", *Journal of Intellectual Capital*, 1(2): 155-176.
- Guthrie, J. (2001). High-involvement work practices, turnover, and Productivity: Evidence from New Zealand. *Academy of Management Journal*, 44: 180-190
- Hamann, P. M., Schiemann, F., Bellora, L., & Guenther, T. W. (2013). Exploring the Dimensions of Organizational Performance: A Construct Validity Study. *Organizational Research Methods*, 16(1): 67–87
- Hamid, M., Maheen, S., Cheem A. and Yaseen, Rizwana (2017) Impact of Human Resource Management on Organizational Performance, *Journal of Accounting & Marketing*, Volume 6 • Issue 1 • 1000213
- Hannan, M. T and Freeman, John (1977) The population Ecology of Organisations, *American Journal of Sociology*, Volume 82, Issue 5, 1977: 929-964
- Heikal, Mohd & Khaddafi, Muammar & Ummah, Ainatul. (2014). Influence Analysis of Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), Debt To Equity Ratio (DER), and current ratio (CR), Against Corporate Profit Growth In Automotive In Indonesia Stock Exchange. *International Journal of Academic Research in Business and Social Sciences*, 4(12): 101-115
- Hossain, S., Islam, R. & Bhuiyan, M. P. (2014). Recognition, Measurement and Accounting Treatment of Human Resource Accounting. *International Journal of Ethics in Social Sciences*, 2(2): 91-104
- IASB (2000). Statement by the Board of the International Accounting Standards Committee, International Accounting Standards Board, available at: www.iasc.org.uk. Viewed on 11th June, 2019
- Ichsani, S. & Rinta, S. A. (2015). The Effect of Return on Equity (ROE) and Return on Investment (ROI) on Trading Volume. *Procedia - Social and Behavioral Sciences*, 211: 896-902
- Ifurueze, M. S., Odesa, J. O., & Ifurueze, P. C. (2014). Impact of aggregated cost of human resources on profitability: An empirical study. *Journal of Business and Management*, 3(2): 30-43
- Ijeoma, N., & Aronu, C. O. (2013). The Contribution of Creative Accounting on Economic Development. *International Journal of Scientific & Engineering Research*, 4 (9): 2499-2502
- Ijeoma, N., Bilesanmi, A. O. & Aronu, C. O. (2013). Determining the contribution of human resource accounting (HRA) on financial statement of Nigerian banks using the mantel test analysis. *International Journal of Scientific & Technology Research*, 2(10): 51-55
- Ikpefan, O. A., Kazeem, B. L. O. & Taiwo, J.N. (2015) Human Capital Accounting

- and Performance of Microfinance Banks (MFB) in Nigeria. *Research Journal of Finance and Accounting*, 6 (1):
- Ikpefan, O. A., Kazeem, B. L. O. and Taiwo, J. N. (2015) Human Capital Accounting and Performance of Microfinance Banks (MFB) in Nigeria, *Research Journal of Finance and Accounting*, Vol.6, No.1: 65-73.
- Isaac, O. I., Mayor, B. M. & James, O. (2017). Human Capital Accounting and Market Value of Oil and Gas Companies in Nigeria. *International Journal of Innovative Research in Science, Engineering and Technology*, 6(11) 21364- 21369
- Islam, M. A., Kamruzzaman, M. & Redwanuzzaman, M. (2013). Human Resource Accounting: Recognition and Disclosure of Accounting Methods & Techniques. *Global Journal of Management and Business Research Accounting and Auditing*, 13(3):1-9.
- Izedonme, P. F., Odeyile, L. G. & Kuegbe, K. (2013). Human resource accounting and its impact on Organizational performance. *Journal of economics and sustainable development*, 4(15): 50-56
- Jaradat, N. & AL-Ma'ani, A. (2010). Impact of Human Capital on Organization Performance. *Interdisciplinary Journal of Contemporary Research in Business*, 2(4): 63-73
- Jenatabadi, H. S. (2015). An Overview of Organizational Performance Index: Definitions and Measurements. Online at
SSRN: <https://ssrn.com/abstract=2599439> or <http://dx.doi.org/10.2139/ssrn.2599439>
- Johansson, J. (2007). Sell-side analysts creation of value—key roles and relational capital. *Journal of HRCA: Human Resource Costing and Accounting*, 11(1): 30–52
- Kalpana, R. (2013), Factors affecting the Organizational Commitment with special reference to Women Faculties of Engineering Colleges, *Research Explorer (A refereed Bi Annual)*. *International Research Journal on multi-disciplinary*, 1(I): 16-18
- Kaplan. R. S., & Norton, D. P. (2010). Conceptual foundations of the balanced scorecard. *Harvard Business Review*, 88(1): 114-120
- Kashive, N. (2013). Importance of human resource accounting practices and implications of measuring value of human capital: Case study of successful PSUs in India. *XIMB Journal of Case Research*, 4(02): 113-143
- Kenton, W. (2019). Human Capital. Available at
<https://www.investopedia.com/terms/h/humancapital.asp>, retrieved on 08/06/2019
- Koch, C. & Kok, J. (1999). A Human-resource-based theory of the small firm. *EIM Small Business Research and Consultant*, 44pp

- Kohlbeck, M. (2004). "Investor Valuations and Measuring Bank Intangible Assets". *Journal of Accounting, Auditing, and Finance*, 19: 29 - 60.
- Kouhy, R., Rishma, V., Takeo, Y. & John, I. (2009) "Human resource policies, management accounting and organisational performance". *Journal of Human Resource Costing & Accounting*, 13(3): 245-263
- Krueger, A. B. & Lindahl, M. (2001). "Education for Growth: Why and for Whom?" *Journal of Economic Literature*, American Economic Association, 39(4): 1101-1136
- Kumar, S. & Priyanka, A. (2018). Human resource accounting and organizational performance. *Indian Journal of Accounting*, 50(1):21-27
- Kumar, T. M., Kavida, V. & Jegajothi, R. (2016). Valuation of human capital in Infosys technologies Ltd. *International Journal of Commerce and Management Research*, 2(8): 55-59
- Kwon, D. (2009). "Human capital and its measurement." *Proceedings of the 3rd OECD World Forum on Statistics, Knowledge, and Policy*, pp1-15. Available at <http://www.oecdworldforum2009.org/>
- Lawler Iiu, Edward E. and Suttle, J. Lloyd (1973) Expectancy Theory and Job Behaviour, *Organizational Behaviour and Human Performance* 9, 482-503
- Lee, Seongsin (2007) Academic Library Service Consumer (User) Motivation Study Based on Expectancy Theory, A Dissertation submitted to the College of Information in partial fulfillment of the Requirements for the degree of Doctor of Philosophy, the Florida State University, College of Information.
- Likert R. (1971). Human Organizational Measurements: Key to Financial Success"; *Michigan Business Review*, 1-5
- Likert, R. & Likert, J. G. (1976). *New ways of managing conflict*. New York, McGraw-Hill, 375pp
- Likert, R. & Pyle, W., C., (1971). *Human Organizational Measurement: Key to Financial Success*. Michigan Business Review, 1-5
- Likert, R. M. (1967). *The human organization: Its management and value*. New York, McGraw-Hill Book Company, 258pp
- Liu, G. & Fraumeni, B. M. (2014), "Human capital measurement: a bird's eye view". In: *UNU-IHDP and UNEP, Inclusive Wealth Report 2014: Measuring progress toward sustainability*. Cambridge, Cambridge University Press, pp83-107
- Marcantonio, M. D., Laghi, E. & Mattei, M. (2015). Does Intellectual Capital Affect Business Performance? *Journal of Modern Accounting and Auditing*, 11 (10): 515-531

- Martin-de-Castro, G., Navas-Lopez, J. E., Lopez-Saez, P., & Alama-Salazar, E. (2006). Organizational capital as competitive advantage of the firm. *Journal of Intellectual Capital*, 7(3), 324–37
- Mathibe, Isaac (2008) "Expectancy Theory and its implications for employee motivation," *Academic Leadership: The Online Journal*: Vol. 6 : Iss., Article 8. Available at: <https://scholars.fhsu.edu/alj/vol6/iss3/8> . Accessed on 10/8/2019
- Mehra, R., Maheshwari, C. A. M. & Meena, K. K. (2014). Valuation of Human Assets and Its Proposed Position in the Balance Sheet. *International Journal of Engineering Development and Research*, 2(3): 3239-3242
- Meritum (2002). *Measuring Intangibles to Understand and Improve Innovation Management, Target Socio-Economic Research*. Brussels, European Commission.
- Micah, L. C., Ofurum, C. O. & Ihendinihu, J. U. (2012). Firms' financial performance and human Resource accounting disclosure in Nigeria. *International journal of business and Management*, 7(14): 67-75
- Micheal, O. B. (2013). Comparative analysis of human resources accounting disclosure practices in Nigeria financial services and manufacturing companies. *Journal of Humanities and Social Sciences*, 16 (1), 20- 36
- Ndubuisi, A. N., Mary-Fidelis, A. C., Chinyere, O. J. & Okika, E. C. (2016). Effect of Risk-Based Audit on Quality Internal Control of Selected Deposit Money Banks in Nigeria. Available online at SSRN: <https://ssrn.com/abstract=3050253>
- Neely, A., Gregory, M. and Platts, K. (1995). Performance Measurement System Design: A Literature Review and Research Agenda. *International Journal of Operations & Production Management*, 15: 80-116.
- Neely, A.D. (1998). *Measuring Business Performance*. London, Economist Books
- Nishizawa, T. (2002). Alfred Marshall on Human Capital and Future Generation. *Economic Review*, Hitotsubashi University, 53(4):305-321
- OECD (1996). *Assessing and certifying occupation skills and competences in vocational education and training*. Washington, D.C., OECD Publications and Information Center, 205pp
- Ofurum, C. O. & Adeola, S. O. (2018). Human resource accounting and profitability of quoted firms in Nigeria. *International Journal of Advanced Academic Research | Accounting & Economic Development*, 4(2): 58-73
- Ogbodo, O. & Egbunike, C. (2016). The Relationship between Human Resource Performance Ratios and Financial Performance of Nigerian Firms. *Journal*

- of Resources Development and Management, 18: 70-87
- Ogenyi, M.A., & Oladele, K.O. (2015). Human resource accounting in Nigeria: An analysis of challenges. *Research Journal of Finance and Accounting*, 6(22), 15-20.
- Okeke, C. R. (2016). Human capital accounting: A literature review. *Accounting*. 2:1-10
- Oko, S. U. (2018). Human Asset Accounting and its impact on the Performance and Financial Position of Firms: A study of Selected Companies. *Account and Financial Management Journal*, 3:1703-1712.
- Okpako, P. O., Atube, E. N., & Olufawoye, O. H. (2014). Human Resource Accounting and Firm Performance. *Global Journal of Commerce & Management Perspective*, 3(4), 232-237
- Okpala, O. & Chidi, O. C. (2010). Human capital accounting and its relevance to stock investment decisions in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*. 64-76
- Okwy, P. O. & Christopher, C. O. (2010). Human capital Accounting and its relevance to Stock Investment Decisions in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 21: 64- 76
- Olajide, P. O., Olugbenga, F. A., Ahmodu, O. L. & Omobola, M. A. (2018). An Empirical Study of Human Resource Accounting Disclosure on Financial Performance of Selected Listed Firms in Nigeria. *Journal of Accounting and Management*, 8(2): 70-83
- Olayiwola, J. A. (2016). Human Capital Accounting Information and Firms' Value: an Analysis of Selected Quoted Manufacturing Companies in Nigeria (2007-2014). *International Journal of Economics, Commerce and Management*, United Kingdom, 4(5): 14-27
- Oluwatoyin, A. S. (2014). Human resources accounting and disclosure in financial statement: Literature review. *Research Journal of Finance and Accounting*, 5(22), 64-75
- Onyinyechi, O. C. & Ihendinihu, J. U. (2017). Human resource accounting and financial performance of firms in Nigeria: Evidence from selected listed firms on the Nigerian stock exchange. *International Journal of Interdisciplinary Research Methods*, 4(2): 25-33
- Osemeke, M. (2017). Human Resources Accounting: Issues, Benefits and Challenges. *International Journal of Economics, Finance and Management Sciences*, 5(3): 129-138
- Oxley, L., Le, T. & Gibson, J. (2008). Measuring human capital: Alternative methods and international evidence.

- The Korean Economic Review, 24(2):283-343
- Pandey, P. & Pandey, M. M. (2015). Research methodology: tools and techniques. Romania, Bridge Center, 118pp
- Parijat, Pranav and Bagga, Shilpi (2014) Victor Vroom's Expectancy Theory of Motivation – An Evaluation International Research Journal of Business Management: Volume No – VII, September - 2014 Issue – 9: 1-8
- Perez, J. R., & Ordonez de Pablos, P. (2003). Knowledge management and organizational competitiveness: A framework for human capital analysis. Journal of Knowledge Management, 7(3): 82–91
- Perry, C., Riege, A. & Brown, L. (1999). 'Realism's role among scientific paradigms in marketing research', Irish Marketing Review, 12(2): 16-23
- Prince F.I., Lucky G.O. and Kingsley K. (2013). Human resource accounting and its impact on organizational performance. Journal of economics and sustainable development.
- Pokorná, Jana & Částek, Ondřej. (2013). How to measure organizational performance in search for factors of competitiveness. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis. 61: 451-461.
- Porwal, L. S. (1993). Accounting theory – An introduction. New Delhi, Mc Graw–Hill, 510pp.
- Porwal, L. S. (1993). Accounting theory: an introduction (2nd ed.). New Delhi, Tata McGraw-Hill, 398pp.
- Potelienė, S., & Tamašauskienė, Z. (2014). The rate of return to investment in education: A case study of Lithuania. Wrocław Review of Law, Administration & Economics, 4(2): 41-55.
- Prabhakar, R. D. (1993.) "Human Asset Accounting: An Evaluation of the Indian practices". ASCI Journal of Management, 22.
- Rahaman, M. M., Hossain, M. A., Akter, T. (2013), Problem with human resource accounting and a possible solution. Research Journal of Finance and Accounting, 4(18), 1-10.
- Rao, A. L. (2014). Human Resource Accounting: A Frame Work for Better Financial Accounting and Reporting. IOSR Journal of Business and Management, 16(4), 86-90.
- Riahi-Belkaoui, A. (2014). Business and Society: Searching for a paradigm. Available online at https://www.researchgate.net/publication/308051576_Business_and_Society_Searching_for_a_paradigm
- Riahi-Belkaoui, A. (2019). The Human Asset Report. Available at SSRN: <https://ssrn.com/abstract=3333413>
- Roos, G., Fernsrtom, L., & Pike, S. (2004). Human resource management and

- business performance measurement. *Measuring Business Excellence*, 8(1), 28–37
- Sadan, S. and Auerbach, L.B. (1974), “A Stochastic Model for Human Resource Valuation. *California Management Review*, 25(4): 24-31
- Salem, E. (2013).** *Constructing Lebanon: A Century of Literary Narratives*. Gainesville, University Press of Florida, 292pp
- Saragih, J. L. (2015). The Effects of Return on Assets (ROA), Return on Equity (ROE), and Debt to Equity Ratio (DER) on Stock Returns in Wholesale and Retail Trade Companies Listed in Indonesia Stock Exchange. *International Journal of Science and Research Methodology*, 8 (3): 348-367
- Saunders, M.N.K., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students* (5th ed.). Harlow -United Kingdom, FT Prentice Hall, 649pp
- Schmidt, F. L.; Hunter, J. E. & Pearlman, K. (1982), “Assessing the Economic Impact of Personnel Programs on Workforce Productivity”. *Personnel Psychology*, No. 35, pp. 333-346
- Schultz, T. (1985). Changing World Prices, Women's Wages, and the Fertility Transition: Sweden, 1860-1910. *Journal of Political Economy*, 93(6): 1126-1154
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1): 1-17.
- Schwan, E. S. (1976). The effects of human resource accounting data on financial decisions: An empirical test. *Accounting, Organisations and Society*, 219–237.
[http://dx.doi.org/10.1016/0361-3682\(76\)90024-6](http://dx.doi.org/10.1016/0361-3682(76)90024-6)
- Sirisetti, S. & Mallesu, H. (2012). Human Resource Accounting Model in Indian Industries. *The Journal of Commerce*, 4 (2): 48-53
- Starovic, D. and Marr, B. (2003). Understanding corporate value: managing and reporting intellectual capital, Available: [http://www.cimaglobal.com/Documents/ImportedDocuments/intellectualcapital\(1\).pdf](http://www.cimaglobal.com/Documents/ImportedDocuments/intellectualcapital(1).pdf)
- Strauss, G. (1976), “Human Resource Accounting: Introduction”. *Journal of Industrial Relations*, 15: 55-69
- Stroombergen, A. & Rose, D. & Nana, G. (2002). Review of the Statistical Measurement of Human Capital. *Statistics New Zealand*, 1–53
- Suciu, L., Mortan, Maria and Iazar, Lucreția (2013) Vroom’s expectancy theory. An empirical study: civil servant’s performance appraisal influencing expectancy, *Transylvanian Review of Administrative Sciences*, No. 39 E/2013, pp. 180-200

- Sveiby, K.E. (1997). The intangible asset monitor. *Journal of Human Resource Casting and Accounting*, 2(1): 73-97.
- Sveiby, K.-E. (2004) 'When measuring fails – try learning!', *International Journal of Learning and Intellectual Capital*, 1(3): 370–376
- Sweetland, Scott. (1996). Human Capital Theory: Foundations of a Field of Inquiry. *Review of Educational Research - Review of Educational Research*, 66:341-359.
- Van der Zahn, J. L. W. M., Inderpal, S., & Heniro, J. (2007). Is there an association between intellectual capital disclosure, underpricing and long-run performance? *Journal of HRCA: Human Resource Costing & Accounting*, 11(3): 178–21
- Van Eerde, Wendelien and Thierry, Henk (1996) Vroom's Expectancy Models and Work-Related Criteria: A Meta-Analysis, *Journal of Applied Psychology*, Vol. 81, No. 5, 575-586
- Vermeeren, A., Vets, E., Vuurman, E. F., Van Oers, A. C., Jongen, S., Laethem, T., Heirman, I., Bautmans, A., Palcza, J., Li, X., Troyer, M. D., Wrishko, R., McCrea, J. & Sun, H. (2016). On-the-road driving performance the morning after bedtime use of suvorexant 15 and 30 mg in healthy elderly. *Psychopharmacology (Berl)*, 233(18):3341-3351.
- Vroom, Victor. H. (1964) *Work and motivation*. John Wiley & Sons, New York.
- Wallman, S. M. H. (1996). The Future of Accounting and Financial Reporting Part II: The Colorized Approach. *Accounting Horizons*, 10: 138-148
- Wallman, S. M. H. (1995). The future of accounting and disclosure in an evolving world: The need for dramatic change. *Accounting Horizons*, 9: 81-91
- Weetland, S. (1996). Human Capital Theory: Foundations of a Field of Inquiry. *Review of Educational Research – Review of Education Research*, 66:341-359
- Yin, R. K. (2011). *Qualitative Research from Start to Finish*. New York, Guilford Press, 386pp
- Youndt, M. A., & Snell, S. (2004). Human resource configurations, intellectual capital, and organizational performance. *Journal of Management Issues*, 16(3): 337–60.
- Zeff, S. A. (2018). Evolution of US Generally Accepted Accounting Principles (GAAP). Available at <https://www.iasplus.com/en/binary/resource/0407zeffusgaap.pdf>
- Zimmerman, A. & Bloom, R. (2016). The matching principle revisited. *Accounting Historians Journal*, 43: 79-119.