

## ACHIEVING A CONCENSUS ON HUMAN RESOURCES ACCOUNTING: A REVIEW OF LITERATURE

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### Abstract

*This paper is a theoretical discourse and review on human resource accounting which remains an issue both for research and in practice. The library-based research design was used in this study. It is an established fact that the human resource is an integral component of every business and constitutes a key intangible asset for companies. However, unlike other assets, human resource does not conform to the peculiar patterns of conventional accounting assets in a strict sense and hence cannot be treated as such. Research efforts and models such as the replacement cost, opportunity cost, present value of discounted future earnings, etc have evolved overtime to try to properly capture, measure and report human resource and each model has its own weakness that makes it daunting for human resource to be fully amenable to the postulations of the models. Many researchers have thus shifted to issues of human resource disclosures in annual reports which basically concerns itself to what is disclosed about human resources such as training, welfare, compensation packages amongst others. This again does not provide much insight to the core issue of human resource accounting which involves cost to recruit, select, hire, train, compensate and develop human assets on one hand and calculating the economic value of people to the organization on the other. The study concludes that there is need for more robust research efforts and quantification methodologies for human resource accounting and the role of financial reporting standards will be crucial in helping to achieve some sort of consensus in moving forward on this issue of human resource accounting.*

**Key words:** Human resource accounting, Human resource valuation models.

### 1. Introduction

The underpinning concept in Human Resource Accounting (HRA) is that the people in a company (the human resources) represent a certain value that can be compared to other resources (Flamholtz, Bullen & Hua, 2002). HRA implies accounting for people as human assets. It can be used as a management tool to measure human resources (Flamholtz, Bullen & Hua, 2002). The concept of considering human beings as an asset is an old phenomenon and it goes back to the labour theory of value where pioneering economists argued on firm value creation via labour. The major tenet of HRA is that it involves accounting for the company's management and treats employees as human capital which provides future benefits. Basically, human resource accounting is the process of identifying and measuring data about human resources and communicating this information to interested parties (Enofe, Mgbame & Otuga, 2013). Human resource accounting helps management frame policies for human resources especially where it is necessary to identify, measure and disclose data about the people within an organization, where they are recognized as an accounting resource. It involves two areas of measurement: first it measures the cost incurred by an organization to recruit, select, hire, train and develop human assets, and secondly, it involves calculating the economic value of people to the organization. According to Okpala and Chidi (2010), Human resource accounting relates to the quantification in monetary terms of human resources employed by an organization.

Early interest in HRA came from several sources, such as the economic theory of human capital, where the first attempt to value human beings in monetary terms was made by Sir William Petty as early as 1691. Further efforts were made by William Far in 1853, followed by Earnest Engle in 1883. Flamholtz et al. (2002), states that some theorists like Scot (1925) spoke about treating people as assets and accounting for their value at the beginning of the twentieth century.

There are still several challenges in the human accounting research and there appears yet no consensus on the best way to account for human capital. Recognizing human resources as assets in the financial statements of financial positions, depend on the definition of asset, which is an economic resource controlled by an entity as a result of a previous transaction, and the criteria of recognition is related to the probability of inflow benefits from the assets to the entity, and the possibility of the reliable measurement of these benefits. There are several models and approaches that measure the value of HR and suggest how to disclose it in financial statements. Though different models and methods such as the replacement cost, opportunity cost, present value of discounted future earnings, etc have already been proposed for HRA, it is still extremely difficult to determine the actual value of the human

resources of a firm. Exacerbating this issue is the fact that there is currently no legislation on reporting human resource practice. This explains the lack of uniformity in the presentation of information on human capital in annual reports. Except the accounting standard on intangible asset (IAS 38) and employee benefit-IAS 19 (employee benefit is only an aspect in human resource accounting), there is no accounting or financial reporting standard that specifically and comprehensively addresses the issue of human resource accounting, reporting and disclosure. This has resulted in the absence of standardization for reporting human resource practice. The focus of this paper is to examine the literature on human resource accounting. The remaining part of the paper is the literature review with particular emphasis on conceptual issues, measurement and valuation issues; empirical review and conclusion

## 2. Literature Review

### Conceptual Issues

Human resource accounting was introduced in the accounting literature in the 1960s as a part of goodwill (Flamholtz, 1986). In 1968, Brummet, Flamholtz & Pyle used the term “human resource accounting” for the first time. According to Chaturvedi (2013), the development of human resource accounting (HRA) originated from the growing needs of the importance of human assets in the management of organization. It functions as a department that monitors the people that are involved in the organizational resources, as well as monitoring the development, progress in assets and revenues of the company. HRA can be considered both an internal and an external discipline: internal as a management tool external as a reporting tool. In HRA, human resources are viewed as assets or investments of the organization (Abeysekera, 2006).

According to the American Accounting Association’s Committee on Human Resource Accounting (1973), Human Resource Accounting is nothing but “the process of identifying and measuring data related to human resource and communicating this information to interested parties. Parameswaran and Jothi (2011), refer to American Accounting Association’s definition of human resource accounting as the process of measuring data of human resources and communicating the information to the interested parties. Raghav (2011), states that Human resources accounting is a method of measuring the effectiveness of personnel management activities and the use of people in an organization. HRA is not only involved in the measurement of data related to placement, training and development of employees but also involved in the evaluation of financial condition of people in an organization (Shukla & Naghsbandu, 2015). This has been supported by Flamholtz (1971) who defined HRA as “the measurement and reporting of the economic value of people in organizational resource”.

Overall, the HRA can be defined as the process of identifying and measuring data related to human resource for the development and enhancement of economic value of interested parties associated with corresponding organization (Shukla & Naghsbandu, 2015). Seth (2009), stated that Human resource accounting means accounting for people as original resources. According to him, it is the measurement of cost and value of people for an organisation. It is also a way of thinking about the management of people in formal organization. Human resource accounting is an attempt to identify, quantify and report investment made in human resources of an organization that are not presently accounted for under conventional accounting practice (Islam, Kamruzzaman & Redwanuzzaman, 2013). Human resource accounting involves accounting for expenditure related to human asset in an organization as opposed to traditional accounting which merely expense these costs and reduces profit which sub-optimizes financial reporting (Akintoye, 2012).

Rahmanizadeh and Mahesh (2014) opine that human resource accounting is the process of identifying, measuring data about human resources and communicating this information to interested parties. In evaluating the relevance of human resources in financial reporting, Singh and Singh (2009), describe human resources accounting as an accounting technology of identifying, measuring, classifying, summarizing and reporting the data about human resources to the stakeholders for effective decision-making regarding the human resources of an organization. Basically, human resource accounting attempts to identify, quantify, measure, record and disclose human resources in the financial statements of the business. Human resource accounting makes decision making more efficient and effective as it helps in employment, utilizing human resources, transfers, promotion, training, retrenchment, human resource planning, cost-benefit analysis of training, analyze labor turnover and to evaluate long term employee’ investment (Chouhan & Naghsbandi, 2015).

According to Akindehinde, Enyi and Olutokunbo (2015) human resource accounting in simple term is accounting for the value of people in organization to enhance information for decision making by the users of financial information.

### **Measurement and Valuation issues**

Early HRA research involved the continued development of concepts and models for measurement, valuation and accounting for human resource cost and value, with several models emerging. But each has its own limitations and no one model has proved to be more valid than any other. Below are some of the key valuation models and approaches to HRA, where each approach uses different types of methods to determine the value an employee (Dawson, 1994).

#### **Historic Cost Model**

The historic cost method is one of the more popular methods because of its similarities to normal accounting procedures. The model calculates an employee's worth using the total historic costs associated with obtaining and hiring the employee (Dawson 1994). This model is closest to the conventional accounting concept, which derives the costs from transaction data and thus measures the investments in human resources (Brummet, Flamholtz & Pyle, 1968). A key factor here is that human resources have to be depreciated when their value declines (Hekimian & Jones, 1967). Under this method, capital expenditure on human assets are amortized over an expected life of human assets. When an employee is leaving early, any unrecovered expense will be treated as a loss and charged to the profit and loss account. This method meets the accounting principle of matching cost with revenue. This method is simple and information required to calculate Human Resource Value can be easily ascertained (Sarkar, 2012; Ganesh, 2015). However it is difficult to find out the effective life of human assets and fix the rate at which the cost can be amortized. This method has the following advantages: (i) the method is simple to understand and easy to work out. (ii) the method follows the traditional accounting concept of matching cost with revenue (iii) the method can provide a basis for valuing a firm's return on its investment on human resources. Also this method suffers from the following limitations: (i) The method takes into account only a part of the acquisition cost of an employee. It does not consider the aggregate value of their potential services. (ii) It is difficult to estimate the period over which the human resource will provide service to the organization. It thus creates problems in determining the amount to be amortized over the year, (iii) The value of human assets according to this method goes on decreasing every year due to amortization. However, in reality, the value of human assets increases over time on account of people gaining experience.

#### **Replacement Cost Model**

This model measures the cost to replace a firm's existing human resources. Human resources are to be valued on the assumption that a new similar organization has to be created from scratch and the cost to the firm is calculated if the existing resources were required to be replaced with other persons of equivalent talents and experience. Likert suggests that the cost of an employee should be valued based on what the organization would have to sacrifice to replace an employee if he/she leaves the organization. This includes the cost attributable to the turnover of a present employee, as well as the costs of acquiring and developing a replacement. Also, this method suggests dual notion of replacement cost i.e. positional and personal. Positional replacement cost talks about the sacrifice that is incurred today to replace an existing employee with a new employee with the same caliber to provide the existing services for the same position. There are three elements to the positional cost i.e. hiring, training and severance costs. Severance cost deals with the cost that organization bears when an employee leaves a particular post in the company (Andrade & Sotomayor, 2011).

The limitations of this approach are as follows; (i) There may be no similar replacement for certain existing assets (ii) the replacement value is affected by subjective considerations and, therefore, the value is likely to differ from one another and (iii) it is against conventional accounting practice (Arkan, 2016). According to Sarkar (2012), replacement cost of an employee has been found to be not only highly subjective but often impossible too. At the management level, finding an exact replacement may be not only be difficult but also impossible. The exit of a top management level employee may substantially change the value of human assets.

#### **Opportunity Cost Model**

This model is popularly referred to as the "Market Value Method". It is a method that measures the value of human resources based on the economist's concept of 'opportunity cost', where opportunity cost is the value of an asset when there is an alternative opportunity of using it. In this method there is no opportunity cost for those employees who are not scarce. As such only scarce people should form part of the value of human resources. Opportunity costs are considered as an asset value when the target is for alternative use. Only scarce human resources would have value at any particular point of time. Opportunity cost is calculated on the basis of efforts made by several organizational units, profit centres or departments (Heckman & Jones, 1990). According to Arkan (2016) the limitations of this approach are: (i). The total valuation of human resource on the competitive

bid price may be misleading and inaccurate (ii) Only scarce employees are included in this method and as a result other employees may lose their morale, as they are never counted and (iii) It would be difficult to identify the alternative use of an employee in an organization. Also, the disadvantage of this method was that it did not take into account the fact that some employees were not scarce and also the fact that a person with specialized knowledge in one field would have zero valuation for alternate work (Shawai, 2015).

**Present Value of Discounted Future Earning Model**

According to this model, the value of human resource is the present value of his future earning till retirement from the employment. In this model the future earnings of various groups of employees are estimated up to the age of their retirement and are discounted at a predetermined rate to obtain the present value of future earnings used in the case of financial assets. To determine this value, the organization establishes what an employees’ future contribution is worth to it today. This contribution can be measured by its cost or by the wages the organization will pay the employee. The organization does not benefit by monitoring the efficiency of its investment in employee development because the investment has little or no impact on the present valuation of future earnings. According to this model, the value of human resources is ascertained as follows: (i) All employees are classified in specific groups according to their age and skill. (ii) Average annual earnings are determined for various age ranges. (iii) The total earnings which each group will get up to retirement age are calculated. (iv) The total earnings calculated as above are discounted at the rate of cost of capital. The following formula has been suggested for calculating the value of an employee according to this model.

$$E(V_y) = \sum_{y=1}^T P_y(t+1) \sum_{y=1}^T \frac{I_I}{(1+y)^{t-y}}$$

where:

$E(V_y)$  – expected value for human resource for a person his/her age  $Y$  and pension age  $T$ ,

$P_y(t)$  – probability of death,

$T$  – time,

$I_I$  – expected earning for a person in period  $I$ ,

$y$  – specified discount rate for a person.

This method has several limitations: (i) A person’s value to an organization is not entirely determined by the salary paid to him/her. (ii) The model ignores the possibility that an individual may leave the firm for reasons other than death or retirement. (iii) The model does not take into account the changes which people make during their career, from one role to another, at one or more times within the organization itself. This may result in changes in their expected future earnings and ultimately the value of human resources. It ignores the variable of the career movement of the employee within the organization.

**Future Rewards Valuation Model (Stochastic Model)**

This model has been suggested by Flamholtz (1971). This is an improvement on the ‘present value of future earnings model’ since it takes into consideration the possibility or probability of an employee’s movement from one role to another in his/her career and also of his/her leaving the firm earlier than his/her death or retirement. The movement of people from one organizational role to another is a stochastic process with rewards. According to this model, the ultimate measure of an individual’s value to an organization is his/her expected realizable value. Expected realizable value is based on the assumption that there is no direct relationship between costs incurred on an individual and his/her value to the organization at a particular point of time. The value thus arrived at is discounted at a predetermined rate to get the present value of human resources. This model formulated this equation:

$$E(RV) = \sum_{i=1}^n \left[ \sum_{i=1}^m \frac{R_i - P(ri)}{(1+R)^k} \right],$$

where:

$R_i$  – value of  $R$  group of human resource,

$P(ri)$  – probability that a person will occupy specific statuses,

$n$  – case of leaving work,

$R$  – relevant discount rate.

$E(RV)$  – Expected Realizable Value

The limitations of this model are that it that suffers from nearly all the same drawbacks as the present value of future earnings models... In addition, it is difficult to obtain reliable data for determining the value derived by the firm during the period a person occupies a particular position. The model also ignores the fact that individuals operating in a group may have a higher value for the organization as compared to individuals working independently.

**Present Value of Net Benefits Obtained Model**

This model has been suggested by Morse (1973). According to Morse, there are two components of Human Resource Accounting: Human Asset Accounting and Human Capital Accounting. Both these components deal with two different aspects of total human resource employed in an organization. Morse made an attempt to establish relation between value of human asset and value of human capital employed in an organization. The value of human asset is the net present value of services rendered by the employees to an organization both at individual level and services rendered collectively in team. Whereas the value of human capital employed is present value of future earning of the employees presently working in an organization. Net benefit arises to the organization only if value of human asset exceeds the value of human capital, that is, the gross value of the services he renders exceeds the value of the expenditures the organization makes to obtain these services. It means employee’s skill and knowledge are valuable to an organization.

According to this model, the value of human resources is equivalent to the present value of net benefits derived by the firm from the service of its employees.

$$A = \sum_{i=1}^N = \int_y^N \frac{I_i(t)}{(1+r)^{t-y}} dt + \int_y^T \frac{X(t)}{(1+r)^{t-y}} dt,$$

where:

- A – value of human assets to a formal organization,
- N – number of individuals currently employed by the organization,
- y – current time,
- T – highest time at which an individual currently employed leaves the organization,
- $I_i(t)$  – net value of the services rendered by an individual  $i$  at time  $t$  to the organization,
- $r$  – time value of money.

**Certainty Equivalent Net Benefit Model (Ogan model).**

This model was suggested by Ogan (1976) and is essentially an extension of the “net benefit approach” as suggested by Morse. According to this approach, the certainty with which the net benefits in future will accrue should also be taken into account, while determining the value of human resources. The approach requires the determination of the following: (i) his or her net benefit (ii) a certainty factor which is comprised of the employee's probability of continued employment and probability of survival. and (iii) the net benefits from all employees multiplied by their certainty factor will give certainty equivalent net benefits. This will be the value of human resources of the organization. The model is presented below;

$$K_{kj} = \left[ \sum_{i=1}^n \sum_{k=t}^{l-t} \frac{1}{(1+r)^k} \right] \times V_{aj},$$

Where:

- $K_{kj}$  – total adjusted net present values of human resources in a Professional service organization,
- $l$  – end of estimated useful life of the employee for the organization
- $j$  – chain of existing the worker in the job 1, 2, 3, ...,  $n$ ,
- $V_{aj}$  – net certain benefits created from the existing human resource in the firm.
- $r$  - discount rate external to the organization (risk free)
- $k$  – time periods in the future
- $t$  – some time period from 1 to L
- $q$  –  $k+t$

This approach is defended by accountants for the following reasons: (i) Adherence to conservative accounting principles which rejects any accounting procedures that increase profits or increase assets. This inhibits the acceptance of viewing investments in human resources as assets because it will have the effect of increasing

profits in the short term versus expected losses in the future if any human resources left the firm. (ii) Human resources may have value from the point of entity view, but may not have any market value if the unit has decided to dispense from the work. (iii) The expansion of the disclosure to include the disclosure of investment in human resources may lead to the achievement of benefits to the firm, but at the same time the expansion of the disclosure will be at a high cost which may exceed the benefits expected by it.

### **Empirical Literature Review**

On the empirical side, several studies have tried to look at different perspectives of human resource accounting and disclosures either in regards to the level of human resource accounting disclosures made by companies, factors determining such disclosures or the effect of such disclosures on organizational outcomes. Zubek (2018) examined the extent of human resources in the annual reports of Qatar listed companies. The results indicated that, for the companies sampled, all disclosed information relating to the HR, variations existed. The most frequently reported area was "training information". Throughout the reports, the analysis found no evidence relating to the disclosure of "consultation with employees" "employment of disabled people" and "value added by employees". In terms of disclosure methods, the results showed that the companies used all the methods (financial, quantitative and descriptive) to disclose HR, although the most of HR information in the annual reports was descriptive.

Abudu, Valogo and Chilala (2018) note that human resource is the most valuable asset of any business organization. This is because it utilizes other resources to create value for the organization yet it is not incorporated into the statement of financial position of the business. The study examines what accounts for its exclusion and the way forward. It was revealed that the inclusion of the human resource in the Statement of Financial Statement cannot be achieved now until broader consultation and participation of key actors in the accounting field. Developing an appropriate and acceptable model for Human Resource Accounting is very difficult to achieve because of the variables to include in the model.

Ofurum and Adeola (2018) examined the relationship between human resource accounting and the profitability of quoted firms in Nigeria. The study used staff remuneration as proxy for Human Resource Accounting; while net operating profit and return on capital employed were used as proxies for profitability. The study used secondary data from audited financial reports of nine (9) service firms quoted on the Nigerian Stock Exchange (NSE) from 2011 -2015. The findings revealed that there is no significant relationship between Human Resource Accounting and the profitability of quoted firm.

Lee and Siddiq, (2012) examined perceptions of stakeholders in Malaysia. This research investigated the impact factors, obstacles and motivators on the development of the concept of human resource disclosure in the Malaysian context. The study's findings indicate that the awareness of human resource disclosure as a dependent variable has a significant positive relationship with the independent variables of size of the companies, type of industry, listing status of the companies a weak negative significant with financial performance, and non-significant relationship with the mission statement disclosure.

Based on a longitudinal research approach, De Silva, Stratford and Clark (2014) examined the human capital information reporting patterns of New Zealand companies over seven years. De Silva, Stratford and Clark (2014) found that although there was an increase in human capital information reporting from 2004 to 2010, there was no strong pattern reflecting a marked increase in reporting over the time period. Taliyang, Latif and Mustafa (2011) carried out a study with the objective of identifying the determinants and the extent of intellectual capital disclosure among Malaysian listed firms. The variables tested in this study are age, size, leverage, profit, ownership and growth. A sample of 150 companies listed in Bursa Malaysia was selected consisting of five industries: Information Technology, Consumer Product, Industrial Product, Trading/Services and Finance. The result from the study showed that about 72.6 percent of the companies selected disclosed intellectual capital in their annual reports. That data show that four variables are determinants of human resource disclosures age, size, director ownership and growth.

Vithana (2014) carried out a study to address the current practice of accounting and financial reporting recognition of firms' human capital investment, considering both determinants and consequences of the practice utilizing a stakeholder approach. The research is undertaken with data collected from annual reports of firms of FTSE 100 listing of London Stock Exchange for five accounting years, (2004-2009). The results of the analysis revealed that firm size, intellectual capital intensity, industry categorized based on the enhanced regulation mechanism, profitability, firm liquidity, and some of the corporate governance attributes including board and committee mechanism of the firms have had significant impact on different aspects of accounting and financial reporting recognition of firms human capital investment.

Islam, Kamruzzaman and Redwanuzzaman (2013) carried out a study on Human Resource Accounting: Recognition and Disclosure of Accounting Methods & Techniques. The aim of the study was to understand the needs and significance of HRA. They concluded that Human resources are the energies, skills and knowledge of people which are applied to the production of goods or rendering useful services. Furthermore, as per accounting standards disclosure of human resource accounting information follows historical cost approach to human asset valuation but this fails to show current cost. This is why economic value approach is more relevant.

Al-Hamadeen and Suwaiden (2014) carried out a study to investigate the Intellectual Capital (IC) voluntary disclosures as limited attention is given to examine IC practices of the business entities in the developing countries (including Jordan). Specifically, the paper documents the practices by the large industrial Jordanian firms when disclosing information related to IC and to what extent they do report such non-financial information in their annual reports. The findings suggest that information about the intellectual capital has been extensively disclosed by the industrial companies in Jordan. Up to 59% of the hypothesized IC disclosure items were found in the annual reports of the study sample.

Mondal and Ghosh (2014) carried out a study to examine the factors that determine the proportion of intellectual capital disclosure in the annual reports. For the purpose of the study thirty Indian knowledge-intensive companies (software, pharmaceuticals, and finance) are selected (on the basis of highest market capitalisation) for the period 2009-2012. Empirical results show that audit committee's size, age, and firm size have positive relation with intellectual capital disclosure but VAIC, profitability, and leverage have negative relationship with intellectual capital disclosure.

Enyi and Adebawojo, (2014), investigated human resource accounting and decision making in post-industrial economy. The empirical study was carried on 16 publicly quoted Nigerian banks using the Ex-post facto research design. Based on these findings the study concluded that there is need to value human asset and reflect this value in the financial statement like other intangible assets. This is the only true path towards complete business information goal congruence.

### Conclusion

Human resource accounting remains a highly debatable issue both for research and in practice. As have been observed, it is already an established fact that the human resource is an integral component of every business and constitute a key intangible asset for companies. However, unlike other assets, human resource do not conform to the peculiar patterns of conventional accounting assets in a strict sense and hence cannot be treated as such. Research efforts and models have evolved overtime to try to properly capture, measure and report human resource and each model has its own weakness that makes it daunting for human resource to be fully amenable to the postulations of the models. Many researchers have thus shifted to issues of human resource disclosures in annual reports which basically concerns itself to what is disclosed about human resources such as training, welfare, compensation packages amongst others and the factors that could lead to the volume of such disclosures. This actually may not provide much insight to the core issue of human resource accounting which involves cost to recruit, select, hire, train and develop human assets on one hand and calculating the economic value of people to the organization on the other. As earlier observed, a pressing issue is the fact that there is currently no legislation on reporting human resources practice. Except the accounting standard on intangible asset (IAS 38) and employee benefit (IAS 19) - employee benefit is only an aspect of human resource accounting), there is no accounting or financial reporting standard that specifically and comprehensively addresses the issue of human resource accounting, reporting and disclosure. The study concludes that there is need for more robust research efforts and quantification methodologies for human resource accounting and the role of financial reporting standards will be crucial in helping to achieve some consensus in moving forward on the issue of human resource accounting.

### References

- Abdolreza, G., & Mohd, A. Y. (2014). Quality of intellectual capital and human resource on the firm valuation. *Open Journal of Accounting*, 3(2), 59-70.
- Abeysekera, I. (2006). The project of intellectual capital disclosure: Researching the research. *Journal of Intellectual Capital*, 7(1), 61-77.
- Abudu, D., Valogo, M. & Chilala, O., (2018). Human resource accounting: the missing element in the statement of financial position. Empirical evidence from Ghana. Retrieved from <http://www.iiste.org>.
- Akindehinde, A. O., Enyi, E. P., & Olutokunbo, A. O. (2015). Human asset accounting and corporate performance. *American International Journal of Contemporary Research*, 5(1), 45-52.
- Akintoye, I. R. (2012). The relevance of human resource accounting to effective financial reporting. *International Journal of Business, Management and Economics Research*, 3(4).



- Al-Hamadeen, R., & Suwaiden, M. (2014). Contents and determinants of intellectual capital disclosure: Evidence from annual reports of the Jordanian industrial public listed companies. *International Journal of Business and Social Science*, 5(8), 165-175.
- American Accounting Association Committee, (1973). Report of the AAA Committee on Accounting for Human Resources. *The Accounting Review*, Supplement to, 48, 189.
- Andrade, P., & Sotomayor, A. M. (2011). Human Capital Accounting–Measurement Models. *International Journal of Economics and Management Sciences*, 1 (3), 80
- Arkan.T. (2016). Human Resources Accounting: A Suggested Model for Measurement and Valuation. *Finanse, Rynki Finansowe, Ubezpieczenia*, 1 (79), 173–193.
- Brummet, R. L., Flamholtz, E. G., & Pyle, W. C. (1968) Human resource measurement: A challenge for accountants. *The Accounting Review*, 43, 217-224.
- Chouhan, V., & Naghshbandi, N. (2015). Measuring employees value: A critical study on human resource accounting in India. *International Journal of Management, Accounting and Economics*, 2(4), 277-292.
- Dawson, J., (2004). The making and remaking of organization context: Duality and the institutionalization process. *Accounting, Auditing and Accountability Journal*, 17(4), 506-542.
- De Silva, T., Stratford M., & Clark, M. (2014). Intellectual capital reporting: A longitudinal study of New Zealand companies. *Journal of Intellectual Capital*, 15(1), 157-172.
- Enofe, A. O., Mgbame, C., Otuya, S., & Ovie, C. (2013). Human resources accounting disclosures in Nigeria quoted firms. *Research Journal of Finance and Accounting*. 4(13), 7-12.
- Enyi, P. E., & Adebawojo, O. A. (2014). Human resources accounting and decision making in post- industrial economy. *American International Journal of Contemporary Research*, 4(2).
- Flamholtz, E. A. (1971). Model for human resources valuation: A stochastic process with service rewards. *The accounting Review*, 70-72.
- Flamholtz, E. G. (1986). Human resource accounting, Jossey Boss Publishers, San Francisco, London.
- Flamholtz, E. G., Bullen, M. L., & Hua, W. (2002). Human resource accounting: A historical perspective and future implications. *Management Decision*, 40(10), 947-54.
- Ganesha, K. S. (2015). Study of Human Resource Accounting Practices. *IOSR Journal of Business and Management*, 17 (1), 23.
- Grojer, E., & Johnson, I. (2005). Assessing the quality of disclosure on intangibles in the Spanish capital market. *European Business Review*, 17(4), 305-313.
- Hasnas, J. (1998). The normative theories of business ethics: A guide for the perplexed. *Business Ethics Quarterly*, 8(1), 19-42.
- Hekinminvan, M. S. & Jones, M. P. (1990). Recognition, measurement and accounting treatment of human resource. *International Journal of Ethics in Social Sciences*, 2(2), 91-104.
- Hossain, M., & Hammami, H. (2009). Voluntary disclosures in the annual reports of an emerging country: The case of Qatar. *Advances in Accounting, Incorporating Advances in International Accounting*, 25(2), 255-65.
- Islam, M. A., Kamruzzaman, M., & Redwanuzzaman, M. (2013). Human resource accounting: Recognition and disclosure of accounting methods and techniques. *Global Journal of Management and Business Research Accounting and Auditing*, 13(3), 1-10.
- Lev, B & Schwartz, A. (1971). On the use of the economic concept of human capital in financial statements. *The Accounting Review*, 46(1), 103-112.
- Morse, W. J. (1973). A note on the relationship between human assets and human capital. *The Accounting Review*, 48(3), 589–593
- 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) 12-32
- Ogan P. (1976) A Human Resource Value Model for Professional Service Organizations, *Accounting Review*, 51(2).
- Okpala, P.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*, 4(21), 13-18.
- Oyewo, B. M., Faboyede, O. S., & Fakile, A. S. (2014). Human resource management and accounting as strategies for achieving global competitiveness and vision 2020 in Nigeria. *Journal of South African Business Research*, 1-48
- Parameswaran, R., & Jothi, K. (2005). Human resources accounting: The Chartered Accountant, 867-874. Retrieved from <http://220.227.161.86/10501jan05p867-874.pdf> on 18th January, 2015.
- Raghav, G. (2011). Human resources / Human resources accounting. Retrieved from <http://en.allexperts.com/q/Human-Resources-2866/2011/2/HUman-re>.



- Rahmanizadeh, F., & Mahesh, R. (2014). Human resources accounting disclosures in Indian companies. *Tactful Management Research Journal*, 2(5), 1-8.
- Sarkar, D. (2012). Challenges of Human Resource Accounting (HRA) in India-An exploratory study. *EXCEL International Journal of Multidisciplinary Management Studies*, 2 (9), 180-181
- Seth, N. (2009). Human resource accounting practices and Indian industries. November 18, 2009. Retrieved from <http://ssrn.com/abstract=1508519> on 20th January, 2015.
- Shawai, A. S. (2015). The Needs for Human Resource Accounting: Prospects & Challenges. *Advances in Economics and Business Management*, 2 (1), 11.
- Shukla, A., & Naghsbandi, N. (2015). Comparative analysis of human resource accounting practices in Indian companies. *International Journal of Research and Development – A Management Review*, 4(4), 1-7.
- Singh, H. K., & Singh, V. (2009). Human resource accounting practices in infosys technologies ltd: An evaluation. *Management Insight*, 5(1), 67-73.
- Taliyang, S. M., Latif, R. A., & Mustafa, N. H. (2011). The determinants of intellectual capital disclosure among Malaysian listed companies. *International Journal of Management and marketing research*, 4(3), 25-33.
- Vithana, V. K. G. (2014). Accounting and financial reporting recognition of firms human capital investment: An empirical investigation of firms in the FTSE 100 listing of the London Stock Exchange. Working Paper Series, Durham University.
- Zubek, F. (2018). Human resource disclosure: practice and influences by Qatar listed companies. *International Journal of Economics, Commerce and Management*, 3(6), 21-3