HUMAN RESOURCE ASSESTS: VALUATION AND DISCLOSURE AS INNOVATION IN ACCOUNTING EDUCATION

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Abstract

This paper examines human resource assets valuation and disclosure in financial statements as an innovation in financial reporting. It focuses in particular onhuman resource accounting approaches to the recognition, measurement and valuation human resource assets as well as its approaches to the disclosure of human assets in financial reports. Secondary data were used, drawn from both theoretical and empirical related literature reviewed. The findings are that there are divergences in approaches used by different interest groups. It is recommended, among other things, that there is urgency for international financial reporting Standards to be developed and issued to harmonize the implementation of human resource accounting practices as innovation in accounting education.

Highlight: Human resource assets, human resource valuation models, intangible assets disclosures and accounting education.

It is widely acknowledged that human resources are keys to the success or failure in any firm. Human Resource Accounting (HRA) 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... Usually firms who apply HRA concepts in their accounting systems situate this information in a separate section of their annual reports, and provide a detailed account of their human resources. While physical assets such as plants, machinery, buildings etc. are necessary for any organization, they are largely static and unproductive on their own and require a decision in order to be profitably utilized.

Clearly, the profitability, productivity, solvency and efficiency of any organization depend largely upon the activities of resources. Reporting on human assets usually includes a profile of human assets, the compensation pattern, training and development events and policies, human asset productivity, human asset value, and the total wealth of the organization. The concept underpinning the HRA is that the people in a company (the human resources) represent

A certain value that can be compared to other resources (Flamholtz, E.G., Bullen, M.L., & Hua, W. 2002).

Traditional accounting also involves sophisticated calculations requiring all manner of estimations, assumptions and variables that need to be factored in. HRA instead focuses on the accounting of costs associated with acquiring personnel along with the programs adopted to enhance personnel efficiency. Traditionally in financial statements it is tagged as human capital or intellectual asset accounting and usually labeled as investments made in the Human Resources of an organization.

Human capital refers to a set of knowledge and competence, skills and training, innovation and capabilities, attitudes and skills, learning ability and motivation of the people who form the organization. It is argued that quantifying the value of Human Resources helps management to cope up with the changes in its quantum and quality so that equilibrium can be achieved between the required resources and the provided human resources.

Objectives of the study

The broad objective of the study is to examine Human Resource Accounting approaches to the treatment of Human Resource Assets in Financial Statements and Reports.

The specific objectives are:

to examine Human Resource Accounting approaches to the recognition, measurement and valuation of human resource assets; and to examine Human Resource Accounting approaches to the disclosure of Human Resource Assets in financial reporting.

Literature review

Human Resources also known as- Human Capital, in the real sense is noted by Itami (1987) as intangible or invisible asset. It is a component of intellectual.

Capital or capability. Dean McKenna and Krishman (2012) posit that Human Resources comprise of the talents, Skills, knowledge and competencies of a company's work force. Furthermore, Yusuf (2013) reiterate that Human Resource is a broad concept encompassing many components but essentially describing the quality of the labour force. Human Resource (Human Capital) itself is a component of the wider concept of intellectual Capital. (Paolo, 2002)Advancement in economic growth has gradually witnessed a gradual shift ya'/n production based economy to service oriented economy ca t economy where the emphasis is on intellectual capability of the work force that is the intellectual capital.

Intellectual capital is an intangible asset different from physical and financial assets which are tangible organizational assets.. Paolo (2002) classifies capital as follows:
Human Capital, Structural Capital, Organizational Capital, Process Capital, Innovation Capital and Relation Capital.

Concepts of Human Resources Accounting (HRA)

HRA implies accounting for people as human assets where it can be used as a tool to measure human resources and as a management tool (Flamholtz, 2002).The concept of considering human beings as assess is an old phenomenon and it goes back to the labour theory of value where pioneering economists argued on firm value creation via labour, For example, Paton (1920) as cited in Porwel (1993) casts doubt on the credibility of a balance sheet without the presentation of loyal personnel. In the mid 1990's accounting for people had greatly been improved, leading to the phrase "our people are our greatest asset". The major tenet of HRA is that it involves accounting for the company's management and treats employees as human capital that provides future benefits. For example, expenditures related to human resources are reported as assets on the balance sheet as opposed to the traditional accounting approach company's human resources as expenses on the income statement that

reduce profit.

Tracing the historical development of the conceptual and philosophical framework for HRA reflects clearly the development in the definition of this branch of accounting over the years. Interestingly, the Dictionary of Economy (Bhat 2000), defines HRA as "all human, material, real and monetary elements that can be drawn and used in the production of economic goods to satisfy social needs". Additionally, Andrikopoulos (2005)defined HRA as "the process of identifying, measuring and communicating information about human resources in order to facilitate effective management within an organization". For the first time recognition and the quantification of human resources for the purpose of assisting the effective management of an organization and to other parties as a key part of the HRA process has been introduced.

However, it is argued that this definition is unformed as it is not specific as to what constitutes human resources expenditure and how it is to be recognized. From an academic perspective a more specific definition of HRA is the one given by Flamhotz (1969), which refers to HRA as "the process which involves measuring the cost incurred by business firms and other organizations to recruit, select, hire, train and develop human asset". For the first time, the relationship between the expenditure on human resources and its role in valuation and reporting has been recognized.

Early Development of Human Resource Accounting Concepts

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 169k Petty was of the opinion that labour was the father of wealth and it must be included in any estimate of national wealth. Further efforts were made by William Far in 1853, followed Eamest Englein 1883. Flanihotz et at (2002), states that some theorists like (1925) spoke about treating people as assets and accounting for their value via the beginning of the twentieth century.

However, the most productive period of research of human HRA started the beginning of the 1960s and was strongly influenced by the disciplines of sociology, industrial psychology and economics (Gusenrow & Tower, 2006). Research in1999 by Flanihotz, Pylet and his team at **Michigan University** generated achronological history of the development of Human Resources Accounting depicted by five stages. They are:

The First Stage (1964-1966): The interest in human resources accounting began in this period (1960s). A number of theorists such as Scott (1925) and Peyton (1962) supported the idea of considering human resources as its asset and valuation. Also, organizational psychologists like Lilcert believed that human resources were considered to be in default as the valuable resources of organization. Hermanson (1964-1986) presented a model for human resource valuation to the financial reporting of an external organization. He identified that human resource accounting was primarily used as a managerial tool, instead of as a way to value people as assets.

The second stage (1967-1969): This stage coincided with the formation of university research teams to develop and evaluate the validity of the historical cost determination model and the value of human resources. In this period, research was conducted to determine the current and future applications of

human resource accounting as a tool for managers and financial information users. This means applying research for formulating potential. In early 1967, research teamLikert, Bromet, Pile and Flamholtz conducted plans to develop the HRA conceptsand methods. The result of this research was published by Bromet and colleagues(1968), the term human resource accounting investigated the objections relating to asset rather than its calculation.

The third stage (1970 — 1976): In the 1970s, interest in human resource accounting grew rapidly and involved a lot of academic research throughout the world, while at the same time,interest grew at the organizational level. In this period, a lot of research into the application of HRA theory within organizations occurred. The American Accounting Association (AAA) established a committee to oversee the development of human resource accounting Flamholtz et el (2002).

Several authors reported that human resource accounting had an impact on decision making, including Tomassini (1974) whose findings showed that the HRA was data can be effective for management decisions relating to the employees' prioritization at retention and selection of employees. Flamholtz (1979) conducted some research to study the effect of figures related to the value of human resources on official accountants' decisions. The results of this study showed a significant statistical difference between the decisions based on figures calculated on traditional methods of personnel selection and those figures based on the value of human capital including monetary and non-monetary items. In this period Flamholtz (1971-1972) presented a model based on the premise that the value of an individual is based on the services that he/she will provide to the firm.

The fourth stage (1977-1980): Starting in 1977 until 1980, some decrease in interests in human resources accounting was noted. Flamholtz and Ansari (1978) proposed the use of HRA as a managerial tool for use in management science. One of the reasons for the reduction of interest in HRA was that the previous preliminary studies that were conducted in to HRA, were relatively simple while the remaining studies were highly complex. Moreover, it became apparent that research into the application of HRA required **the interest and**cooperation of organizations and also cost money to conduct.

The fifth stage (1981-1990s): Commencing in 1981, this stage included a revival of interests in the practical application of human resource accounting.The real reasons behind this renewed interest was economic development and a transition from a production-driven economy towards a service-oriented economy, and some part of a knowledge-based economy. The application of HRA principles made it possible to understand the importance of human resources for organizations supported the emergence of intellectual capital over and above physical assets. In this new framework, the future success of the organizations was affected by intellectual capital rather than the physical capital (i.e. total human capital and intangible assets). Before, accounting was unable to respond dynamically to changing conditions because of a fixed focus on static physical assets. In the present era companies, need information to come through that can continuously evaluate individuals' skills and abilities. This information providing tools about human capital is the same fundamental aspect of HRA (Flamholtz, Bulen, Hua 2002). Some authors argued that human resource accounting had failed because of a lack of practical use Johnson (1997), however others defended the status of HRA by highlighting a lack of new researchers in this area (Grojer, in 1997). Unfortunately, the lack of quantitative results to prove

the HRA on decision-making has hindered the establishment of a specific, measurable impact (Roslender, Dyson 1992).

Challenges of HRA:

Some professional accountants and Researchers argue against HRA with objections that include:

(a) Sensitive Data that is not something that can be shared externally are involved. The main obstacle for reporting human capital externally information reported could be sensitive to the reporting companies and regarded something that should not be shared externally.

(b) Measurement Not a First Priority for the Company: Companies do not attach first priority to the measurement of human assets; rather they face more urgent issues like human resource requirements and allocation.

(c) Awareness and Acceptance: The level of awareness and acceptance of HRA is still low as many companies take little initiative to make the information available to shareholders despite having the data available.

(d) Dynamism of Some Industries: Certain industries, like information technology, are very dynamic due to frequent discoveries and technological advancement. In these types of industries, it is very difficult to predict as to what is going to be the future requirements and how technology is going to shape things in the near future

(e) Lack of Clear Guidance and Universal Practice: the lack of a universal approach to its reporting thereby defining the standards that would allow for valuable and meaningful comparisons. There is currently an absence of a universal definition, which does not assist the companies' measure.

(f) Lack of an Industry Standard: The absence of an industry standard means that every company has to evolve its own standard, which can become a tedious process considering that most of them are still involved in Improving their business.

(g) Global and Group Issues: The issue of autonomy in global and groupcompanies poses another problem in the application of HRA. Differences in valuation of human resources across the countries and overlaid with different levels of salaries' or value from the same specific man skills, different measurements and different disclosures may create more complex problems in harmonizing international accounting standards.

Human Resource Measurement and Valuation Models

Against the foregoing background, the following models have emerge:

1. Historical Cost Valuation Model (Flamboltz Model 1) under this model an employee's worth or value is computed using the total historical cost associated with recruiting and hiring the employee (Dawson, 1994). The total capital expenditure on the employee as a Human Asset is amortized over the expected life of the human asset. When an employee leaves earlier, any un-recovered cost is expensed as a loss and charged to the profit and loss Account.

Criticism of model

Some flaws have been identified concerning the validity

i. It is difficult to determine the effective life the accurate rate of amortization.

ii. The actual cost incurred in recruiting, hiring, training and developing. Human Resource of the firm are not fully captured by they are divided into two classes, namely; Revenue Expenses charged to

profit and loss account and capital expenditure capitalized for amortization

2. Replacement Cost Valuation model (Likert and Flamboltz Model) This model is based on the mobility of the labour force associated with HIRE and FIRE philosophy of capitalist economies. The model **discharge cost approach.** It measures and values Human Resource on the assumption that, if the existing resources were required to be replaced with other persons of equivalent talents and experiences, what will **be** the cost to the organization

The relevant costs measured are the cost attributable to the turnover of a present employee as well as-the cost of acquiring and developing a replacement.

Criticism of Model

The comparability of the asset bases reflected in the balance Sheets of Firms in different economies is ignored. Companies in welfare economies like Japan with Long life employment philosophy and stable work force are likely to have very robust asset base of Human resources, than those in capitalist economy with HIRE and FIRE philosophy, high labour turnover and consequently low Human Resource asset base.

Human Resource Value Based Models

1. Present Value of Discounted Schwartz Model)

Lev and Schwartz (1971) developed two models by establish what an employee's estimated future contribution will be worth today. The contribution is measured in terms of the wages and compensation packages, the organization will pay the employee over his service Life. The total future contributions are then discounted to present day to obtain the Human Resource values.

The model suggests a four (4) step approach as follows:

I. All employees are classified into specific groups according to their ages and skills;

II. Average annual earnings are determined for various ranges of ages;

III. The total earnings which a group will get up to retirement are calculated and

IV. The total earning calculated above are discounted at the rate of cost of capital of the firm. The value thus obtained is the value of the Human Resource Asset.

Criticisms

The major flaws identified in this model are:

i. The model is based on the assumption that the organization does not benefit monitoring the efficiency of its investment in employee development became the investments have little or no impact on the present value of future earnings. This assumption is viewed as invalid since the cost incurred on employees and developments are benefits to the employee just as their earnings.

ii. Employees' wages and compensation packages vary widely for similar categories of employees, even among companies in the same industry. This will impair the comparability of different companies Human Resource assets bases reflected in their balance sheet.

2. Future Reward Valuation Model or Stochastic Rewards Valuation Model: (Flaniboltz, 1971).

This model originally developed by Flamboltz (1971) for human resource valuation and further explained in Flamboltz (1999) is a five step process which involves the following;

i. Determination of the period for which an employee is expected to serve the organization.
ii. Identification of service stake (i.e. roles or posts) that the employee might occupy during his service career including the possibility of his or her leaving the organization.
iii. Estimation of the probable period for which a person will occupy each possible service state in future in the organization.
iv. Estimation of the value derived by the firm when a person occupies a particular position and
v. The total value of the services derived by the organization from different employees or group of employees is determined. The value thus derived is discounted at a predetermined rate to obtain the present value of the Human Resource Assets.

Criticisms of Model

The flaws in the validity of this model, are viewed as those of the Lev and Schwatz future earnings valuations model. In addition, only large organizations may afford the huge expenses involved in the development of the model.

Empirical Review of HRA in Selected Nations

Australia and New Zealand

Gusenzow and Tower (2006) note that the Australian Football League (AFL) is Australia's premier spectator sport involving millions of people across a wide range of communities, and that it is not surprising that the most valuable assets as regarded by AFL clubs and the AFL hierarchy are the players, the organization's biggest revenue drivers. However in the authors' survey of 79 AFL-linked individuals and 58 accountants and accounting academics to assess whether key stakeholders considered putting the value of players on a balance sheet a plausible idea, findings showed that the majority of respondents disagreed with the concept of showing the value of AFL players in their clubs' balance sheet. Flow ever it is interesting to note that the results from the logistic regression analysis and ANOVA analysis show there is a significant relationship between the concept of valuing AFL players, and both the type of respondent and their knowledge of accounting. Gusenzow and Tower note that although player valuation is a plausible and arguably important idea, a reason for the resistance by AFL respondents could be that AFL has a salary cap to limit amounts paid to players and no transfer fee system. Although the evidence from study did not demonstrate a need to implement player valuations, a move towards financial statement player valuation may be needed if AFL clubs emulate other overseas sporting codes and list on the exchange. Other Australian authors Whiting & Chapman (2003) also investigated the merits of HRA in a professional sport-rugby.

The authors comment that the Australia and New Zealand rugby union is a combination guaranteed to stir patriotic feelings across the Tasman. The authors raise the question that since rugby players are the team's most valuable assets, should value be placed on the balance sheet, and does doing so make any difference to decisions made by financial statement users. They comment that profession has been prevalent in the United Kingdom and the United States for nearly 200 years, but arrived much later in Australia and New Zealand.

US, U.K and Latin America

After the successful implementation of Human Resources Accounting pilot scheme by a US based company R.G Barry Corporation, many organizations in the United States, Canada and Mexico

followed suit. (Gebauer, 2002) Organizations like Milwakee Brave Inc., USA (1963), Touch Ross and Co; Montreal (1971), Texas Instruments (1971), Witte and Co (1975), the US Navy (1984) all have experimented the concept using either historical cost, replacement cost or other valuation models. Furthermore football clubs in Europe and Latin America have since adopted the idea of Human Resource accounting. This is because they keep record for each player relative to his signing fees and transfer fees. Each player has a target or expectation of his performance set by the club managers. At any point in time, the records reveal the amount a player cost the club. In these clubs Human Resource Asset values are placed on the balance and amortized over a period of human resource asset disclosure in financial reports.

The International Financial Reporting Standard (IFRS) do not currently include standard for disclosure and reporting of Human Resource Assets. It could be argued however, that the IFRS board is moving closer to providing more flexible approaches to accounting measurements and reporting. For example, the international standards **IAS 38 Intangible Assets and IFRS 5 Non-Current Assets held for say or discontinue operations** allows for the recognition of the intangible asset goodwill, which indicates a willingness to allow for valuation of assets that are not traditional tangible assets, such as human resources. The valuation of goodwill often involves complex assessments of fair values as well as periodic reassessments to determine whether the fair values have become impaired. These more difficult and challenging measurements of goodwill and other- fair values are similar to some of the challenges documented in the past related to the measurement of human resources, particularly when using the value approach to HRA. Thus, the movement toward fair value accounting seen in recent years for both U.S.GAAP as well as for international standards indicates a more sophisticated approach to the measurement of assets, tangible as well as intangible. This might suggest a willingness to recognize the need for, and consider the measurement and use of HRA in future external financial reporting for Non-Current Assets.

Conclusion

International contributions made to the field of HRA have resulted in growth of both the field HRA and the wider study of human capital, human resource metrics, intellectual capital, and organizational management. Along with advances in HRA theory, it is encouraging to note that some studies have been based on empirical research, case and field studies. Both the process and inclusion of HRA measures in human resource decisions are expected to have implications from the Point of providing measures that can compete with other investment proposals for the firm's resources, and demonstrate that the long-term benefits from such investments can be positive. The movement toward fair value accounting seen in recent years, for both U.S.GAAP as well as for international standards, indicates a more sophisticated approach to the measurement of assets, tangible as well as intangible. This might suggest a willingness to recognize the need for, and consider the measurement and use of HRA in future external financial reporting.

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