Improving Human Resource Accounting through International Financial Reporting Standards

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Abstract
Human Resource is the most valuable asset an organization can possess. Investment in it ultimately brings about growth in the future earnings of an entity. Today, in accounting parlance, it is treated in financial statements as an expense item rather than as an intangible asset which has capacity to generate future stream of incomes. Non-treatment of human resource as an asset obviously distorts the value of economic information presented in financial statements to internal and external decision makers on the real and potential value of the organization’s most valuable asset. This study focuses on the usefulness of Human Resource Accounting and the need to promote its wide acceptance through International Financial Reporting Standards.

This study using First Bank Nigeria Ltd as a case study adopted the Flamholtz’s Historical Cost of Hiring Human Capital model to determine the value of human resources. Secondary data obtained from the annual reports and accounts of First Bank Nigeria Ltd from 2012-2013 was used.

It was discovered that the Gearing, Earnings per Share and Return on Assets of the bank showed better results when human resource value was inputted in the financial report than when human resource value was not inputted in the financial report from 2012 to 2013. It was recommended that the International Accounting Standard Board should develop and issue an International Financial Reporting Standard on treatment of human resources as an asset.


1. Introduction
The value of human resource in the production of goods and services cannot be over emphasized. From time immemorial, man remains the driving force in the creation of goods and services.

Adam Smith, in his classic book – “Wealth of Nation”, identified three factors of production namely land, labour, and capital. In the same dimension, modern management theorists came up with another classification of factors of production, tagged 4Ms of production, as men, machine, material and money. In addition, Alfred Marshall, in his classic work “Principles of Economics”, asserted that “The most valuable of all capital is that invested in human beings.”

Ratti (2012) points out that the success of any organization, to a great extent, depends upon the quality and caliber of the people working in it. In other words, human resources is the most important asset of an organization.

All the processes of the organization are operated by human resource, hence valuation of this resource is very necessary and information about the valuation should be given to the investors, the management and others through financial statements (Pandurangarao et al, 2013).

"Human capital” can be defined as knowledge, skills, attitudes, aptitudes, and other acquired traits contributing to production (Goode, 1959 cited in Fleischhauer, 2007). According to the canonical model, earnings are determined by human capital, which consists of capacities to contribute to production, generically called skills (Bowel, Gintis, and Osborne, 2001).

According to Blundell, Dearden, Meghir, and Sianesi (1999), there are three main components of ‘human capital’— early ability (whether acquired or innate); qualifications and knowledge acquired through formal education; and skills, competencies and expertise acquired through training on the job.

According to Blundell, Dearden, Meghir, and Sianesi (1999), there are two main components of human capital with strong complementarities: early ability (whether acquired or innate) and skills acquired through formal education or training on the job. Human capital differs from other assets because it yields market returns only in proportion to the worker’s supply of labor (Hall and Johnson (1980)). Ishikawa and Ryan (2002) suggest that it is the stock of human capital that predominantly determines the earnings of individuals.

With new phase in economic development, which is characterized by continuous innovation, spread of digital and communication technologies, relevance of network forms of organization, the importance of intellectual capital, relational capital, and organizational capital are emerging. There are many firms that have started measuring, managing and reporting their intangibles (Kashive, 2013).
2. Concept of Human Capital

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2.1 Concept of Human Resource Accounting

American Accounting Association defines Human Resource Accounting, “HRA is a process of identifying and measuring data about human resources and communicating this information to interested parties.” It simply means accounting for people as an organizational resource. It involves identification and measurement of the cost incurred by an organization to recruit, select, hire, train and develop human assets. In the same vein, it measures the economic value of people in the organization. Human Resource Accounting ensures that expenditures relating to human resources are treated as assets as opposed to traditional accounting arrangement which treat such costs as operating expenses. Its not only an effective tool for decision-making but is also widely employed in framing policies for human resources.

3. Theoretical Frame Work

This study considers two theories; the Human Capital Theory and the Learning Curve Theory as the pillar on which it is structured.

3.1 Human Capital Theory

Theodore William Schultz (1902 – 1998), an American economist and the 1979 joint winner of the Nobel Memorial Prize in Economic Sciences, came up with the Human Capital theory in 1961. He researched into why post-World War II Germany and Japan recovered faster than United Kingdom despite the devastation suffered by the former. His research showed that the speed of recovery in Germany and Japan was due to a healthy and highly educated population. He discovered that United Kingdom was still rationing food long after the war.

Gary Stanley Becker (1930 – 2014), an American economist and Nobel Prize winner, is another foremost exponent of Human Capital Theory. He researched into the impact of positive and negative habits such as punctuality and alcoholism on human capital. He employed the different rates of return for different people and the resulting macroeconomic implications. He equally brought out the difference between general to specific education and their influence on job-lock and promotions.

According to the theory, Human capital theory contends that education or training raises the productivity of workers by imparting useful knowledge and skills, thus raising workers’ future income as well, through increase in their lifetime earnings (Enyi and Adebawojo, 2014).

For instance, all competitor firms have the potential to accrue equal value by acquiring employees with knowledge of general management, the ability to apply financial ratios, or general cognitive ability. On the other hand specific skills, provide value only to a particular firm, and such skill are of no value to competing firms. An instance of this is the knowledge of how to use a particular technology used only by one firm, or knowledge of a firms policies and procedures provided to that firm, but usually would not be valuable to other firms.

Enyi and Adebawojo (2014) links up the relevance of Human Capital Theory to Human Resource Accounting on the ground that it considered the cost of education, training, development and even workers medical treatment as investments which is expected to reflect in increased or improved productivity of individual workers.

3.2 Learning Curve Theory

Going down the memory lane, (Omah, Ojo-Agbodu, and Igbokwe, 2012) submit that the theory of learning curve was first introduced by T.P. Wright of Curtiss – Wright, Buffalo, U.S.A., who engaged in the production of air frames. The theory is built on the belief that as the quantity produced of a given product doubles, the cost of that product decreases at a fixed rate.

Learning Curve Theory, according to Akintoye (2012), is concerned with the idea that when a new job, process or activity commences for the first time it is likely that the workforce involved will not achieve maximum efficiency immediately. Akintoye (2012) further states that repetition of the task is likely to make the people more confident and knowledgeable and will eventually result in a more efficient and rapid operation.

Learning curve is basically a measures of the experience gained in production of an article or product by an individual or entity. The more a product is produced, the more efficient the worker becomes. Thus, each subsequent unit consumes fewer man-hours to produce.
The theory is built on the belief that as the quantity produced of a given product doubles, the cost of that product decreases at a fixed rate. Initially, the time required to carry out a task declines and finally stabilizes when efficiency is maximized. Cumulative average time refers to the average time per unit for all units produced so far, from and including the first one made (Akintoye, 2012). The Model of unit curve is denoted as: 
\[ Y_x = K_x \log_2 b \]

Where
- \( K \) is the number of direct labour hours to produce the first unit
- \( Y_x \) is the number of direct labour hours to produce the \( x \)th unit
- \( x \) is the unit number
- \( b \) is the learning percentage

4.0 Literature Review

Ratti (2012) in Analytical Study of Human Resource Accounting Practices—an Indian Experience focuses on the calculation of the value of human resources at different levels of organization & to determine the human resource efficiency quotient. He measured the value of human resources in fifteen companies and found out that the incorporation of the value of Human Resources is very expensive and not easy to calculate. He concludes the value may not indicate the true position of human resource.

Human Resource Accounting gives information regarding inner strength of organization and helps in making decisions regarding long-term investment in that organization (Ratti, 2012).

Akintoye (2012) examined The Relevance of Human Resource Accounting to Effective Financial Reporting using Oceanic Bank Plc as a case study adopted the Lev and Schwartz model to determine the value of human resources, simple linear regression was used to analyze the impact of human resource to effective financial reporting using investment in human capital, profitability and capital employed. He employed secondary data obtained from the annual reports and accounts of Oceanic Bank Plc from 2002-2006 was used. It was discovered that human resource has a positive effect on the profit and capital employed by the bank, lending credence to the findings of Ashton, that there is association between components of intellectual capital and firm- and market level financial outcomes.

Enyi and Adebawojo (2014) in Human Resource Accounting and Decision Making in Post-Industrial Economy investigate the probable effect of Human Resource Accounting on the decision making process and business valuation method on the premise that firms in post industrial economy operate within a competitive economic environment which require timely, effective and efficient decisions to ensure success and survival. It is an empirical study of 16 publicly quoted Nigerian Banks using the Ex-post facto research design. The study finds out that there is need to value Human Asset and reflect this value in the financial statement like other intangible assets.

With new phase in economic development, which is characterized by continuous innovation, spread of digital and communication technologies, relevance of network forms of organization, the importance of intellectual capital, relational capital, and organizational capital are emerging. There are many firms that have started measuring, managing and reporting their intangibles (Kashive, 2013).

Non-financial metrics are the value drivers of the organization, representing the value of the company’s work force, its customer relations and its ability to innovate (Kashive, 2013).

A team of competent, devoted and motivated persons can convert a sick concern into a successful one (Akintoye, 2012). On the other hand, incompetent and disinclined personnel may waste the existing physical and financial resources leading the concern to collapse. It is a common knowledge that capital issues of even new undertakings are oversubscribed if they are floated by competent persons (Akintoye, 2012). The treatment of investment in people as assets can be attributed to two major reasons: first, present and potential investors need such information to help assess the value of a business enterprise, and, second investments in people satisfy the criteria for treatment as an asset (Akintoye, 2012).

The potential advantages for firms are that reporting their HC not only communicate the firm’s advantages, but could also attracts valued resources (Mouriisen et al., 2004 noted in Kashive, 2013). Skoog (2003) cited in Kashive (2013) found a positive correlation between the reported HC and profitability in the long run. A successful firm would understand the expectation of shareholders and their risk perception (Anderson, 2000 noted in Kashive, 2013) and transform the firm’s HC capabilities to better meet shareholders’ expectations (Bassi et al., 2000; MeerKooistra and Zijlstra, 2001 in Kasive, 2013).

To Flamholtz (1974) and McRae (1974) noted in Andrade and Sotomayor (2011)one of the fundamental objectives of the HCA is to develop methods of measuring human resource cost and value. These measurements are intended to provide a means for making decisions involving the recruitment, development, compensation and replacement of human resources on a "value for money."

There is no accounting standard on treatment of Human Resource Accounting either from the International Accounting Standards Board or the Financial Reporting Council of Nigeria. Meanwhile, (Badiyani, 2012) identifies the growth and wide acceptance of International Financial Reporting Standards (IFRS) as a trigger for the necessity of considering human resources as an asset of the firm.

Scholars have predicted that there would be recognition of Human Resource Accounting by International Accounting Standards Board going by the current wave of adoption International Financial Reporting Standards and the desire to improve on economic information provided by financial statements. Akintoye (2012) notes that from the very hot debate going on the adoption of IFRS since 2004 in many countries, it thus appear to us that the issue of human resource accounting may soon find a prominent place in international reporting, as the failure of so many enterprises is now pin down to human behaviour/failure rather than failure of known traditional/conventional assets. He points to the Enron’s case which is still fresh in our minds. Badiyani (2012) supports this position when he observes that the current environment having wide acceptance of International Financial Reporting Standards (IFRS) have encouraged the consideration of non-traditional approach towards the human resources. He further asserts that there is a possibility that future financial reports may include more and more non-traditional measurements such as value calculated of human resources using various HRA models.

Economic information in financial statements is incomplete without the inclusion of non-financial metrics such as human resources, customers, technology and internal processes. Kashive (2013) underscores the importance of non-financial metrics as the value drivers of the organization, representing the value of the company’s work force, its customer relations and its ability to innovate.

The current treatment of Goodwill under IFRS 3 and growing clamour for measurement of the time value of money of assets in financial statements have opened a new vista of opportunity for inclusion of Human Resource Accounting in financial statements. Under International Financial Reporting Standards, certain assets are now reported at their fair market value at each balance sheet date, & many items on the balance sheet that are non-current are measured at the present value of the estimated future cash flows. IAS-38 on Intangibles Assets & IFRS-3 on business combinations allows for the recognition of the intangibles assets-Goodwill.

The accounting standard IAS 19 on Employee benefits merely sets out the accounting treatment and disclosure for employee benefits. It does not specify how human asset should be treated in financial statements. The standard classifies four (4) types of benefits as follows:

i. Short-term employee benefits, such as wages, salaries, vocational holiday benefit, sick pay, profit sharing, or bonus plans paid within 12 months of the end of the period, and non monetary benefits, such as medical care and so on, for current employees.

ii. Postemployment benefits, such as pensions, postemployment medical benefits, and postemployment life insurance.

iii. Termination benefits, such as severance pay.

iv. Other long-term employee benefits including long service leave or sabbatical leave.

Classifying some of the aforementioned benefits as post-employment benefits indicates sufficient justifications for capitalization of such benefits as assets to finance the future liabilities, also IAS 19 includes planning for some employees benefits as plan assets, this may be considered as a declared statement for capitalization some of employees benefits, these plans classified in IAS 26 into two categories: defined contribution plan, depending on these plans, an entity pays a fixed contribution into a separate entity (fund) and will have no legal or constructive obligation to pay further contributions if the fund does not have sufficient assets to pay employee benefits relating to employee service in the current and prior periods (Jaarat, 2013).

6.0 Models on Human Resource Accounting

6.1 The Lev and Schwartz Model

Lev & Schwartz advocated the estimation of future earnings during the remaining service life of the employee and then arriving at the present value by discounting the estimated earnings at the cost of capital (Akintoye, 2012). The assumptions in this method are realistic and scientific. The method has practical applicability when availability of quantifiable and analyzable data is concerned, but this model is unable to give any method to record the value of human resources in the Books of Accounts (Tiwari & Kodwani, 2007 cited in Akintoye, 2012). Lev and Schwartz model has been the most widely used for its ease of use and convenience (Kashive, 2013).

Kashive (2013) identifies three drawbacks in the Lev and Schwartz Model as follows:

i. The model ascertained the earnings on the basis of skills but ignores the concepts of productivity of employees. Skills can not be in directly proportional to earnings unless the skills are properly utilized for productivity.
ii. The model ignores the productivity of promotion of employees except retirement or death.

iii. Expenses of ‘training and development’ incurred by the company are not considered.

According to this model, the value of human capital embodied in a person who is ‘y’ years old, is the present value of his/her future earnings from employment and can be calculated by using the following formula –

\[ E(V_y) = \sum_{T=0}^{T=Y} P_y (t + 1) \sum_{I} I(T)/(i + R)t - y \]

Where, \( E(V_y) \) = expected value of a ‘y’ year old person's human capital

\( T \) = the person's retirement age

\( P_y (t) \) = probability of the person leaving the organization

\( I (t) \) = expected earnings of the person in period I

\( r \) = discount rate

6.2 Historical Cost of Hiring Human Capital

In the model suggested by Flamholtz (1999) the historical cost method, or contract, is to capitalize all costs associated with recruiting, selection, hiring and training and amortize these costs within the projected life of the asset. This model suffers many limitations. One, the economic value of an active human does not necessarily correspond to its historical cost. Again, any appreciation or depreciation may be subjective, with no relationship to any increase or decrease in the productivity of human assets. In addition, the costs associated with recruitment, selection, hiring, training, placement and development of employees might differ from one individual to another within a company.

6.3 Flamholtz’s Model (Determinants of Individual Value to Formal Organization)

According to Flamholtz, the value of an individual is the present worth of the services that he is likely to render to the organization in future (Akintoye, 2012). The model postulates that as an individual moves from one position to another, either at the same level or at different levels, the profile of the services provided by him equally change. Thus, the value of an individual to an organization is taken to be the present cumulative value of all the possible services that may be rendered by such an individual.

Flamholtz in this model comes up with three methods for valuation of expense listed below:

i. Capitalization - The capitalization method is concerned with capitalization of a person's salary and using it as a surrogate measure of human value. This value may be ascertained for groups as well as individuals.

ii. Replacement cost valuation - The replacement cost of a group is regarded as the sacrifice that would have to be incurred today to recruit, select, hire, train and develop a substitute group capable of providing a set of services equivalent to that of a group presently employed. The estimate derived from this method is subjective and that subjectivity reduces its validity and reliability.

iii. Original cost valuation – This method aggregates the original cost of recruiting, selecting, hiring, training, and developing a firm's existing human organization.

6.3 Flamholtz Model (Reward Valuation Method)

This model has been suggested by Flamholtz (1971). This model is an improvement on 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 career and also of his leaving the firm earlier that death or retirement (Akintoye, 2012). According to this model, the ultimate measure of an individual’s value to an organization is his expected realizable value. Expected realizable value is based on the assumption that there is no direct relationship between cost incurred on an individual and his value to the organization at a particular point of time. An individual’s value to the organization can be defined as the present worth of set of future service that he is expected to provide during the period he remains in the organization.

Flamholtz has given the variables affecting an individual’s expected value as individual conditional values and his likelihood of remaining in the organization. The former is a function of the individual’s abilities and activation level, while the latter is a function of such variables as job satisfaction, commitment, motivation and other factors. The roles they will occupy in future will have to be determined probabilistically for each individual.

\[ E(R) = \sum_{i=0}^{R} P(R_i) \cdot R_i \cdot E(R_i) \]

Where: \( E(R) \) = Expected realizable value,

\( R_i \) = the value to be derived by the organization in each possible service state \( i \)

\( P(R_i) \) = probability that an individual would occupy position \( i \)

\( T \) = Time of retirement

\( R \) = Discount rate

7.0 Methodology

This study employed secondary data obtained from First Bank Nigeria Ltd annual reports for a period of two years covering 2012-2013. The Flamholtz’s Historical Cost of Hiring Human Capital model was used to analyze the value of human resource in First Bank Nigeria Ltd.
Data Presentation And Analysis

The data used in this study was obtained from the annual report of First Bank Nigeria Ltd over a period of time which ranged from 2012-2013. From the data, the under listed ratios were derived:

<table>
<thead>
<tr>
<th>RATIO</th>
<th>2013</th>
<th></th>
<th>2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Human</td>
<td>Post Human</td>
<td>Pre Human</td>
<td>Post Human</td>
</tr>
<tr>
<td></td>
<td>Resource</td>
<td>Accounting</td>
<td>Resource</td>
<td>Accounting</td>
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<td>Accounting</td>
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<tr>
<td>N 'millions</td>
<td>N 'millions</td>
<td>N 'millions</td>
<td>N 'millions</td>
<td>N 'millions</td>
</tr>
<tr>
<td>GEARING</td>
<td>2,895,868</td>
<td>2,912,254</td>
<td>2,398,498</td>
<td>2,416,632</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>3,246,577</td>
<td>3,301,198</td>
<td>2,770,674</td>
<td>2,831,121</td>
</tr>
<tr>
<td>Total assets</td>
<td>=89.20%</td>
<td>=88.22%</td>
<td>=86.57%</td>
<td>=85.36%</td>
</tr>
<tr>
<td>EPS</td>
<td>50,318</td>
<td>88,553</td>
<td>86,322</td>
<td>128,644</td>
</tr>
<tr>
<td>Profit</td>
<td>32,632</td>
<td>32,632</td>
<td>32,632</td>
<td>32,632</td>
</tr>
<tr>
<td>No of shares</td>
<td>=1.54</td>
<td>=2.71</td>
<td>=2.65</td>
<td>=3.94</td>
</tr>
<tr>
<td>ASSET TURNOVER</td>
<td>186,871</td>
<td>186,871</td>
<td>195,699</td>
<td>195,699</td>
</tr>
<tr>
<td>Net Interest Income</td>
<td>3,246,577</td>
<td>3,301,198</td>
<td>2,770,674</td>
<td>2,831,121</td>
</tr>
<tr>
<td>Total assets</td>
<td>=5.76</td>
<td>=5.66</td>
<td>=7.06</td>
<td>=6.91</td>
</tr>
<tr>
<td>RETURN ON ASSET</td>
<td>50,318</td>
<td>88,553</td>
<td>86,322</td>
<td>128,644</td>
</tr>
<tr>
<td>Net income</td>
<td>3,246,577</td>
<td>3,301,198</td>
<td>2,770,674</td>
<td>2,831,121</td>
</tr>
<tr>
<td>Total assets</td>
<td>=0.015%</td>
<td>=0.027%</td>
<td>=0.031%</td>
<td>=0.045%</td>
</tr>
</tbody>
</table>

Source: First Bank Ltd Annual Reports

From the above table, the Gearing, Earnings per Share and Return on Assets showed better results when human resource value was inputted in the financial report than when human resource value was not inputted in the financial report from 2012 to 2013. This shows that the use of human resource accounting in the financial report results in effective and efficient use of the bank available assets to generate sufficient earnings which ensures the survival and continuity of the bank.

Conclusion

The study explores the usefulness of Human Resource Accounting to users of financial information in planning and decision making processes. Human Resource is the most valuable asset an organization can possess. It is the driven force behind production of goods and services. The success of any organization, to a large extent, is dependent upon the quality and caliper of the people the organization can boast of: Such vital resource with huge capacity to generate future stream of incomes should be treated as an intangible asset rather than expensed in the statement of comprehensive income. The treatment of investment in people as assets has obvious merits as present and potential investors are in a position to assess the value of a business enterprise. Besides, it helps the management to frame policies for human resources. It provides organizational information on whether to employ more staff or reduce the workforce. Economic information in financial statements is incomplete without the inclusion of non-financial metrics such as human resources, customers, technology and internal processes.

Recommendation

As the harmonization of diverse accounting practices across the globe continues, the International Accounting Standard Board should develop and issue an International Financial Reporting Standard on treatment of human resources as an asset. Pioneers Scholars like Eric G. Flamholtz, Baruch Lev and AbaaSchwartch have developed various models to put value on human resources since 1971. Development and issuance of an accounting standard should not be a herculean task having issued one on treatment of Goodwill as an intangible asset.

References


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